



THE BIRDS OF WASHINGTON



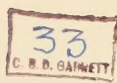




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C. R. D. GAMWETT

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The Birds of Washington



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THE BIRDS OF WASHINGTON

A COMPLETE, SCIENTIFIC AND
POPULAR ACCOUNT OF THE 372 SPECIES OF BIRDS
FOUND IN THE STATE

BY

WILLIAM LEON DAWSON, A. M., B. D., of Seattle

AUTHOR OF "THE BIRDS OF OHIO"

ASSISTED BY

JOHN HOOPER BOWLES, of Tacoma

ILLUSTRATED BY MORE THAN 300 ORIGINAL HALF-TONES OF BIRDS IN LIFE, NESTS,
EGGS, AND FAVORITE HAUNTS, FROM PHOTOGRAPHS BY THE
AUTHOR AND OTHERS.

TOGETHER WITH 40 DRAWINGS IN THE TEXT AND A SERIES OF
FULL-PAGE COLOR-PLATES.

BY

ALLAN BROOKS

BRITISH COLUMBIA EDITION

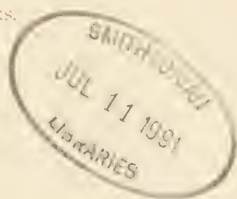
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VOLUME I

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1909

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To the
Members
of the
Caurinus Club,

in grateful recognition of their friendly
services, and in expectation that
under their leadership the interests
of ornithology will prosper in
the Pacific Northwest,
this work is respectfully

Dedicated

EXPLANATORY.

TABLE OF COMPARISONS.

	INCHES.
Pygmy size	Length up to 5.00
Warbler size	5.00- 6.00
Sparrow size	6.00- 7.50
Chewink size	7.50- 9.00
Robin size	9.00-12.00
Little Hawk size, Teal size, Tern size.....	12.00-16.00
Crow size	16.00-22.00
Gull size, Brant size.....	22.00-30.00
Eagle size, Goose size.....	30.00-42.00
Giant size	42.00 and upward

Measurements are given in inches and hundredths and in millimeters, the latter enclosed in parentheses.

KEY OF ABBREVIATIONS.

References under **Authorities** are to faunal lists, as follows:

- T. Townsend, Catalog of Birds, Narrative, 1839, pp. 331-336.
 C&S. Cooper and Suckley, Rep. Pac. R. R. Surv., Vol. XII., pt. II., 1860, pp. 140-287.
 I.₁. Lawrence, Birds of Gray's Harbor, Auk, Jan. 1892, pp. 39-47.
 I.₂. Lawrence, Further Notes on Birds of Gray's Harbor, Auk, Oct. 1892, pp. 352-357.
 Rh. Rhoads, Birds Observed in B. C. and Wash., Proc. Acad. Nat. Sci. Phila., 1893, pp. 21-95. (Only records referring explicitly to Washington are noted.)
 Dt. Dawson, Birds of Okanogan County, Auk, Apr. 1897, pp. 168-182.
 Sr. Snyder, Notes on a Few Species, Auk, July 1900, pp. 242-245.
 Kb. Kolbe, Birds of Cape Disappointment, Auk, Oct. 1900, pp. 349-358.
 Ra. Rathbun, Land Birds of Seattle, Auk, Apr. 1902, pp. 131-141.
 D₂. Dawson, Birds of Yakima County, Wilson Bulletin, June 1902, pp. 59-67.
 S₁¹. Snodgrass, Land Birds from Central Wash., Auk, Apr. 1903, pp. 202-209.
 S₂². Snodgrass, Land Birds Central and Southeastern Wash., Auk, Apr. 1904, pp. 223-233.
 Kk. Keck, Birds of Olympia, Wilson Bulletin, June 1904, pp. 33-37.
 J. Johnson, Birds of Cheney, Condor, Jan. 1906, pp. 25-28.
 B. Bowles, Birds of Tacoma, Auk, Apr. 1906, pp. 138-148.
 E. Edson, Birds of Bellingham Bay Region, Auk, Oct. 1908, pp. 425-439.
 For fuller account of these lists see Bibliography in Vol. II.

References under **Specimens** are to collections, as follows:

- U. of W. University of Washington Collection; (U. of W.) indicates lack of locality data.
 P. Pullman (State College) Collection. Pt. indicates local specimen.
 Prov. Collection Provincial Museum, Victoria, B. C.
 T. Collection C. W. & J. H. Bowles. Only Washington specimens are listed.
 C. Cantwell Collection.
 BN. Collection Bellingham Normal School.
 E. Collection J. M. Edson.

PREFACE.

Love of the birds is a natural passion and one which requires neither analysis nor defense. The birds live, we live; and life is sufficient answer unto life. But humanity, unfortunately, has had until recently other less justifiable interests—that of fighting pre-eminent among them—so that out of a gory past only a few shadowy names of bird-lovers emerge, Aristotle, Pliny the Elder, Ælian. Ornithology as a science is modern, at best not over two centuries and a half old, while as a popular pursuit its age is better reckoned by decades. It is, therefore, highly gratifying to those who feel this primal instinct strongly to be able to note the rising tide of interest in their favorite study. Ornithology has received unwonted attention of late, not only in scientific works but also in popular literature, and it has taken at last a deserved place upon the curriculum of many of our colleges and secondary schools.

We of the West are just waking, not too tardily we hope, to a realization of our priceless heritage of friendship in the birds. Our homesteads have been chosen and our rights to them established; now we are looking about us to take account of our situation, to see whether indeed the lines have fallen unto us in pleasant places, and to reckon up the forces which make for happiness, welfare, and peace. And not the least of our resources we find to be the birds of Washington. They are here as economic allies, to bear their part in the distribution of plant life, and to wage with us unceasing warfare against insect and rodent foes, which would threaten the beneficence of that life. They are here, some of them, to supply our larder and to furnish occupation for us in the predatory mood. But above all, they are here to add zest to the enjoyment of life itself; to please the eye by a display of graceful form and piquant color; to stir the depths of human emotion with their marvelous gift of song; to tease the imagination by their exhibitions of flight; or to goad aspiration as they seek in their migrations the mysterious, alluring and ever insatiable Beyond. Indeed, it is scarcely too much to say that we may learn from the birds manners which will correct our own; that is, stimulate us to the full realization in our own lives of that ethical program which their tender domestic relations so clearly foreshadow.

In the matter herein recorded account has of course been taken of nearly all that has been done by other workers, but the literature of the birds of Washington is very meager, being chiefly confined to annotated lists, and the conclusions reached have necessarily been based upon our own experience, comprising some thirteen years' residence in the State in the case of Mr. Bowles, and a little more in my own. Field work has been about equally divided between the East-side and the West-side and we have both been able to give practically all our time to this cause during the nesting seasons of the past four years. Parts of several seasons have been spent in the Cascade Mountains, but there remains much to learn of bird-life in the high Cascades, while the conditions existing in the Blue Mountains and in the Olympics are still largely to be inferred. Two practically complete surveys were made of island life along the West Coast, in the summers of 1906 and 1907; and we feel that our nesting sea-birds at least are fairly well understood.

Altho necessarily bulky, these volumes are by no means exhaustive. No attempt has been made to tell all that is known or may be known of a given species. It has been our constant endeavor, however, to present something like a true proportion of interest as between the birds, to exhibit a species as it appears to a Washingtonian. On this account certain prosy fellows have received extended treatment merely because they are ours and have to be reckoned with; while others, more interesting, perhaps, have not been considered at length simply because we are not responsible for them as characteristic birds of Washington. In writing, however, two classes of readers have had to be considered,—first, the Washingtonian who needs to have his interest aroused in the birds of his home State, and second, the serious ornithological student in the East. For the sake of the former we have introduced some familiar matter from other sources, including a previous work of the author's, and for this we must ask the indulgence of ornithologists. For the sake of the latter we have dilated upon certain points not elsewhere covered in the case of certain Western birds,—matters of abundance, distribution, sub-specific variety, etc., of dubious interest to our local patrons; and for this we must in turn ask their indulgence.

The order of treatment observed in the following pages is substantially the reverse of that long followed by the American Ornithologists' Union, and is justifiable principally on the ground that it follows a certain order of interest and convenience. Beginning, as it does, with the supposedly highest forms of bird-life, it brings to the fore the most familiar birds, and avoids that rude juxtaposition of the lowest form of one group with the highest of the one above it, which has been the confessed weakness of the A. O. U. arrangement.

The outlines of classification may be found in the Table of Contents to each volume, and a brief synopsis of generic, family, and ordinal characters, in the

1. The Birds of O. C., by William Lewis Gossman, A. M., B. D., with Introduction, revised Annotation, Key to Eggs, Food, M. S. C. and 1860 Volumes, pp. xlviii + 601, 602, 603, The Washington Publishing Company, 1907.

Analytical Key prepared by Professor Jones. It has not been thought best to give large place to these matters nor to intrude them upon the text, because of the many excellent manuals which already exist giving especial attention to this field.

The nomenclature is chiefly that of the A. O. U. Check-List, Second Edition, revised to include the Fourteenth Supplement, to which reference is made by number. Departures have in a few instances been made, changes sanctioned by Ridgway or Coles, or justified by a consideration of local material. It is, of course, unfortunate that the publication of the Third Edition of the A. O. U. Check-List has been so long delayed, inasmuch that it is not even yet available. On this account it has not been deemed worth while to provide in these volumes a separate check-list, based on the A. O. U. order, as had been intended.

Care has been exercised in the selection of the English or vernacular names of the birds, to offer those which on the whole seem best fitted to survive locally. Unnecessary departures from eastern usage have been avoided, and the changes made have been carefully considered. As matter of fact, the English nomenclature has of late been much more stable than the Latin. For instance, no one has any difficulty in tracing the Western Winter Wren thru the literature of the past half century; but the bird referred to has, within the last decade, posed successively under the following scientific names: *Troglodytes hiemalis pacificus*, *Anorthura h. p.*, *Olbiorchilus h. p.*, and *Nannus h. p.*, and these with the sanction of the A. O. U. Committee—certainly a striking example of how *not* to secure stability in nomenclature. With such an example before us we may perhaps be pardoned for having in instances failed to note the latest discovery of the name-hunter, but we have humbly tried to follow our agile leaders.

In the preparation of plumage descriptions, the attempt to derive them from local collections was partially abandoned because of the meagerness of the materials offered. If the work had been purely British Columbian, the excellent collection of the Provincial Museum at Victoria would have been nearly sufficient; but there is crying need of a large, well-kept, central collection of skins and mounted birds here in Washington. A creditable showing is being made at Pullman under the energetic leadership of Professor W. T. Shaw, and the State College will always require a representative working collection. The University of Washington, however, is the natural repository for West-side specimens, and perhaps for the official collection of the State, and it is to be devoutly hoped that its present ill-assorted and ill-housed accumulations may early give place to a worthy and complete display of Washington birds. Among private collections that of Mr. J. M. Edson, of Bellingham, is the most notable, representing, as it does, the patient occupation of extra hours for the past eighteen years. I am under obligation to Mr. Edson for a check-list of his collection (comprising entirely local species), as also for a list of the birds of the Museum of the Bellingham Normal School. The small but well-selected assortment of bird-skins belonging to Messrs. C. W. and J. H. Bowles rests in the Ferry Museum in Tacoma.

Here also Mr. Geo. C. Cantwell has left his bird-skins, partly local and partly Alaskan, on view.

Fortunately the task of redescribing the plumage of Washington birds has been rendered less necessary for a work of such scope as ours, thru the appearance of the Fifth Edition of Coates Key,^a embodying, as it does the ripened conclusions of a uniquely gifted ornithological writer, and above all, by the great definitive work from the hand of Professor Ridgway,^b now more than half completed. These final works by the masters of our craft render the careful repetition of such effort superfluous, and I have no hesitation in admitting that we are almost as much indebted to them as to local collections, altho a not inconsiderable part of the author's original work upon plumage description in "The Birds of Ohio" has been utilized, or re-worked, wherever applicable.

In compiling the General Ranges, we wish to acknowledge indebtedness both to the A. O. U. Check-List (2nd Edition) and to the summaries of Ridgway and Coates in the works already mentioned. In the Range in Washington, we have tried to take account of all published records, but have been obliged in most instances to rely upon personal experience, and to express judgments which must vary in accuracy with each individual case.

The final work upon migrations in Washington is still to be done. Our own task has called us hither and yonder each season to such an extent that consecutive work in any one locality has been impossible, and there appears not to be any one in the State who has seriously set himself to record the movements of the birds in chronological order. Success in this line depends upon coöperative work on the part of many widely distributed observers, carried out thru a considerable term of years. It is one of the aims of these volumes to stimulate such endeavor, and the author invites correspondence to the end that such an undertaking may be carried out systematically.

In citing authorities, we have aimed to recall the first publication of each species as a bird of Washington, giving in italics the name originally assigned the bird, if different from the one now used, together with the name of the author in bold-face type. In many instances early references are uncertain, chiefly by reason of failure to distinguish between the two States now separated by the Columbia River, but once comprehended under the name Oregon Territory. Such citations are questioned or bracketed, as are all those which omit or disregard scientific names. The abbreviated references are to standard faunal lists appearing in the columns of "The Auk" and elsewhere, and these are noted more carefully under the head of Bibliography, among the Appendices.

At the outset I wish to explain the peculiar relation which exists between

^a Key to North American Birds, by E. H. C. Coates, A. M., M. D., Pl. I., 140th Edition (revised by D. M. Tice) Volumes 1-16, 1912-1912. Boston, Dana Estes and Company, 1912.

^b The Birds of North and Middle America, by Robert Ridgway, Curator, Division of Birds, U. S. National Museum, Bulletin of the U. S. N. M., No. 66, Pl. I., *Descriptive*, pp. xxvi + 312 and Pl. XX, 1900; Pl. II., *Immature*, 1901, pp. xx + 341 and Pl. XXII, 1902; Pl. III., *Morphologic*, 1903, 141 pp. + 334 and Pl. XIX, 1904; Pl. IV., *Feeding*, 1904, 19 + 338 and Pl. XXIV, 1905.

myself and the junior author, Mr. J. H. Bowles. Each of us had long had in mind the thought of preparing a work upon the birds of Washington; but Mr. Bowles, during my residence in Ohio, was the first to undertake the task, and had a book actually half written when I returned to the scene with friendly overtures. Since my plans were rather more extended than his, and since it was necessary that one of us should devote his entire time to the work, Mr. Bowles, with unbounded generosity, placed the result of his labors at my disposal and declared his willingness to further the enterprise under my leadership in every possible way. Except, therefore, in the case of signed articles from his pen, and in most of the unsigned articles on Grouse and Ducks, where our work has been a strict collaboration, the actual writing of the book has fallen to my lot. In practice, therefore, I have found myself under every degree of indebtedness to Mr. Bowles, according as my own materials were abundant or meager, or as his information or mine was more pertinent in a given case.

Mr. Bowles has been as good as his word in the matter of coöperation, and has lavished his time in the quest of new species, or in the discovery of new nests, or in the location of choice subjects for the camera, solely that the book might profit thereby. In several expeditions he has accompanied me. On this account, therefore, the text in its pronouns, "I," "we," or "he," bears witness to a sort of sliding scale of intimacy, which, unless explained, might be puzzling to the casual reader. I am especially indebted to Mr. Bowles for extended material upon the nesting of the birds; and my only regret is that the varying requirements of the task so often compelled me to condense his excellent sketches into the meager sentences which appear under the head "Nesting." Not infrequently, however, I have thrown a few adjectives into Mr. Bowles's paragraphs and incorporated them without distinguishing comment, in expectation that our joint indebtedness will hardly excite the curiosity of any disengaged "higher critic" of ornithology. Let me, then, express my very deep gratitude to Mr. Bowles for his generosity and my sincere appreciation of his abilities so imperfectly exhibited, I fear, in the following pages, where I have necessarily usurped the opportunity.

It is matter of regret to the author that the size of these volumes, now considerably in excess of that originally contemplated, has precluded the possibility of an extended physical and climatic survey of Washington. The striking dissimilarity of conditions which obtain as between the eastern side of the State and the western are familiar to its citizens and may be easily inferred by others from a perusal of the following pages. Our State is excelled by none in its diversity of climatic and physiographic features. The ornithologist, therefore, may indulge his proclivities in half a dozen different bird-worlds without once leaving our borders. Especially might the taxonomist, the subspecies-hunter, revel in the minute shades of difference in plumage which characterize the representatives of the same species as they appear in different sections of our State. We have not gone into these matters very carefully, because our interests are rather

those of avian psychology, and of the domestic and social relations of the birds,—in short, the *life* interests.

While the author's point of view has been that of a bird-lover, some things herein recorded may seem inconsistent with the claim of that title. The fact is that none of us are quite consistent in our attitude toward the bird-world. The interests of sport and the interests of science must sometimes come into conflict with those of sentiment; and if one confesses allegiance to all three at once he will inevitably appear to the partisans of either in a bad light. However, a real principle of unity is found when we come to regard the bird's value to society. The question then becomes, not, *Is this bird worth more to me in my collection or upon my plate than as a living actor in the drama of life?* but, *In what capacity can this bird best serve the interests of mankind?* There can be no doubt that the answer to the latter question is usually and increasingly, *As a living bird.* Stuffed specimens we need, but only a representative number of them; only a limited few of us are fitted to enjoy the pleasures of the chase, and the objects of our passion are rapidly passing from view anyway; but never while the hearts of men are set on peace, and the minds of men are alert to receive the impressions of the Infinite, will there be too many birds to speak to eye and ear, and to minister to the hidden things of the spirit. The birds belong to the people, not to a clique or a coterie, but to all the people as heirs and stewards of the good things of God.

It is of the esthetic value of the bird that we have tried to speak, not alone in our descriptions but in our pictures. The author has a pleasant conviction, born of desire perhaps, that the bird in art is destined to figure much more largely in future years than heretofore. We have learned something from the Japanese in this regard, but more perhaps from the camera, whose revelations have marvelously justified the conventional conclusions of Japanese decorative art. Nature is ever the nursing mother of Art. While our function in the text has necessarily been interpretative, we have preferred in the pictures to let Nature speak for herself, and we have held ourselves and our artists to the strictest accounting for any retouching or modification of photographs. Except, therefore, as explicitly noted, the half-tones from photographs are faithful presentations of life. If they inspire any with a sense of the beauty of things as they are, or suggest to any the theme for some composition, whether of canvas, fresco, vase, or tile, in things as they might be, then our labor shall not have been in vain.

In this connection we have to congratulate ourselves upon the discovery, virtually in our midst, of such a promising bird-artist as Mr. Allan Brooks. I can testify to the fidelity of his work, as all can to the delicacy and artistic feeling displayed even under the inevitable handicap of half-tone reproduction. My sincerest thanks are due Mr. Brooks for his hearty and generous cooperation in this enterprise; and if our work shall meet with approval, I shall feel that a large measure of credit is due to him.

The joy of work is in the doing of it, while as for credit, or "fame," that is a mere by-product. He who does not do his work under a sense of privilege is a

hireling, a clock-watcher, and his sufficient as coveted meed is the pay envelope. But those of us who enjoy the work are sufficiently rewarded already. What tho the envelope be empty! We've had our fun and—well, yes, we'd do it again, especially if you thought it worth while.

But the chief reward of this labor of love has been the sense of fellowship engendered. The progress of the work under what seemed at times insuperable difficulties has been, nevertheless, a continuous revelation of good will. "Everybody helps" is the motto of the Seattle spirit, and it is just as characteristic of the entire Pacific Northwest. Everybody has helped and the result is a composite achievement, a monument of patience, fidelity, and generosity far other than my own.

I gratefully acknowledge indebtedness to Professor Robert Ridgway for counsel and assistance in determining State records; to Dr. A. K. Fisher for records and for comparison of specimens; to Dr. Chas. W. Richmond for confirmation of records; to Messrs. William L. Finley, Herman T. Bohlman, A. W. Anthony, W. H. Wright, Fred. S. Merrill, Warburton Pike, Walter I. Burton, A. Gordon Bowles, and Walter K. Fisher, for the use of photographs; to Messrs. J. M. Edson, D. E. Brown, A. B. Reagan, E. S. Woodcock, and to a score of others beside for hospitality and for assistance afield; to Samuel Rathbun, Prof. E. S. Meany, Prof. O. B. Johnson, Prof. W. T. Shaw, Miss Adelaide Pollock, and Miss Jennie V. Getty, for generous coöperation and courtesies of many sorts; to Francis Kermode, Esq., for use of the Provincial Museum collections, and to Prof. Trevor Kincaid for similar permission in case of the University of Washington collections. My special thanks are due my friend, Prof. Lynds Jones, the proven comrade of many an ornithological cruise, who upon brief notice and at no little sacrifice has prepared the Analytical Key which accompanies this work.

My wife has rendered invaluable service in preparing manuscript for press, and has shared with me the arduous duties of proof-reading. My father, Rev. W. E. Dawson, of Blaine, has gone over most of the manuscript and has offered many highly esteemed suggestions.

To our patrons and subscribers, whose timely and indulgent support has made this enterprise possible, I offer my sincerest thanks. To the trustees of the Occidental Publishing Company I am under a lasting debt of gratitude, in that they have planned and counselled freely, and in that they have so heartily seconded my efforts to make this work as beautiful as possible with the funds at command.

One's roll of obligations cannot be reckoned complete without some recognition also of the dumb things, the products of stranger hearts and brains, which have faithfully served their uses in this undertaking: my Warner-and-Swasey binoculars (8-power)—I would not undertake to write a bird-book without them; the Graflex camera, which has taken most of the life portraits; the King canvas boat which has made study of the interior lake life possible; all deserve honorable mention.

Then there is the physical side of the book itself. One cannot reckon up the

myriad hands that have wrought upon it, engravers, printers, binders, paper-makers, messengers, even the humble goatherds in far-off Armenia, each for a season giving of his best—out of love, I trust. Brothers, I thank you all!

Of the many shortcomings of this work no one could be more sensible than its author. We should all prefer to spend a life-time writing a book, and having written it, to return and do it over again, somewhat otherwise. But book-making is like matrimony, for better or for worse. There is a finality about it which takes the comfort from one's muttered declaration, "I could do it better another time." What I have written I have written. I go now to spend a quiet day—with the birds.

WILLIAM LEON DAWSON.

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The Birds of Washington

VOL. I.

Description of Species Nos. 1-181

THE BIRDS OF WASHINGTON

No. 1.

NORTHERN RAVEN.

A. O. U. No. 486a. **Corvus corax principalis** Ridgw.

Synonym.—Formerly called the AMERICAN RAVEN.

Description.—Color uniform lustrous black; plumage, especially on breast, scapulars and back, showing steel-blue or purplish iridescence; feathers of the throat long, narrow, pointed, light gray basally; primaries whitening at base. Length two feet or over, female a little smaller; wing 17.00-18.00 (438); tail 10.00 (247); bill 3.20 (76.5); depth of bill at nostril 1.00 (28.5); tarsus 2.68 (68).

Recognition Marks.—Large size,—about twice as big as a Crow; long rounded tail; harsh croaking notes; uniform black coloration. Indistinguishable afield from *sinuatus*.

Nesting.—*Nest*: a large but compact mass of sticks, lined with grass, wool, cow-hair, etc., placed high in fir trees or upon inaccessible cliffs. *Eggs*: 4-7 (8 of record), usually 5, pale bluish green or olive, spotted, blotched, and dashed with greenish brown and obscure lilac or purple. Av. size, 1.90 x 1.33 (48.26 x 33.78). *Season*: April 15; one brood.

General Range.—"Arctic and Boreal Provinces of North America; south to Eastern British Provinces, portions of New England, and Atlantic Coast of United States, higher Alleghenies, region of the Great Lakes, western and northern Washington, etc." (Ridgway).

Range in Washington.—Found sparingly in the Cascade and Olympic Mountains, more commonly along the Pacific Coast.

Migrations.—Resident but wide ranging.

Authorities.—[Lewis and Clark, Hist. Ex. (1814), Ed. Biddle: Cones, Vol. II, p. 185.] *Corvus carnicivorus* Bartram, **Baird**, Rep. Pac. R. R. Surv. IX, 1858, pp. 561, 562, 563. (T). C&S. L., D(?) B. E.

Specimens.—(U. of W.) Prov. C.

ALTHO nowhere abundant, in the sense which obtains among smaller species, nor as widely distributed as some, there is probably no other bird which has attracted such universal attention, or has left so deep an impress upon history and literature as the Raven. Primitive man has always felt the spell of his sombre presence, and the Raven was as deeply imbedded in the folklore of the maritime Grecian tribes as he is today in that of the Makahs and Quillayutes upon our own coast. *Korax*, the Greek called him, in imitation of his hoarse cry, *Kraack, kraack*; while the Sanskrit name, *Karaka*, reveals the ancient root from which have sprung both *Crow* and *Raven*.

Quick-sighted, cunning, and audacious, this bird of sinister aspect has been invested by peoples of all ages with a mysterious and semi-sacred character. His ominous croakings were thought to have prophetic import, while his preternatural shrewdness has made him, with many, a symbol of divine knowledge. We may not go such lengths, but we are justified in placing this bird at the head of our list; and we must agree with Professor Alfred Newton that the Raven is "the largest of the Birds of the Order Passeres, and probably the most highly developed of all Birds."

The Raven is a bird of the wilderness; and, in spite of all his cunning, he fares but ill in the presence of breech-loaders and iconoclasts. While it has not been the object of any special persecution in Washington, it seems to share the fate reserved for all who lift their heads above the common level; and it is now nearly confined in its local distribution to the Olympic peninsula; and is nowhere common, save in the vicinity of the Indian villages which still cling to our western shore.

In appearance the Raven presents many points of difference from the Common Crow, especially when contrasted with the dwarf examples of the north-western race. It is not only larger, but its tail is relatively much longer, and fully rounded. The head, too, is fuller, and the bill proportionately stouter with more rounded culmen. The feathers of the neck are loosely arranged, resulting in an impressive shagginess; and there is a sort of uncouthness about these ancient birds, as compared with the more dapper Crow.

Ravens are unscrupulous in diet, and therefrom has arisen much of the dislike which has attached to them. They not only subsist upon insects, worms, frogs, shellfish, and cast-up offal, but devour the eggs and young of sea-birds; and, when pressed by hunger, do not scruple to attack rabbits, young lambs, or seal pups. In fact, nothing fleshly and edible comes amiss to them. In collecting along the sea-coast I once lost some sandpipers,—which I had not had time to prepare the evening before—because the dark watcher was "up first". Like the Fish Crow, they hang about the Indian villages to some



NORTHERN RAVEN

extent, and dispute with the ubiquitous Indian dog the chance at decayed fish and offal.

Altho by force of circumstances driven to accept shelter and nesting sites in the dense forests of the western Olympic slope, the Raven is a great lover of the sea-cliffs and of all wild scenery. Stormy days are his especial delight and he soars about in the teeth of the gale, exulting, like Lear, in the tumult: "Blow winds, and crack your cheeks!" The sable bird is rather majestic on the wing, and he soars aloft at times with something of the motion and dignity of the Eagle. But the Corvine character is complex; and its gravest representatives do some astonishingly boyish things. For instance, according to Nelson, they will take sea-urchins high in air and drop them on the cliffs, for no better reason, apparently, than to hear them smash. Or, again, they will catch the luckless urchins in mid-air with all the delight of school-boys at tom-ball.

Nests are to be found midway of sea-cliffs in studiously inaccessible places, or else high in evergreen trees. Eggs, to the number of five or six, are deposited in April; and the young are fed upon the choicest which the (egg) market affords. We shall need to apologize occasionally for the shortcomings of our favorites, and we confess at the outset to shameless inconsistency; for even bird *villains* are dear to us, if they be not too bad, and especially if their badness be not directed against us. Who would wish to see this bold, black brigand, savage, cunning, and unscrupulous as he is, disappear entirely from our shores? He is the deep shadow of the world's *chiaroscuro*; and what were white, pray, without black by which to measure it?



POINT OF THE ARCHES GROUP, A CHARACTERISTIC HAUNT OF THE RAVEN.

Isler.

No. 2.

MEXICAN RAVEN.

A. O. U. No. 486. *Corvus corax sinuatus* (Wagler).

Synonyms.—AMERICAN RAVEN. SOUTHERN RAVEN.

Description.—Like preceding but averaging smaller; bill relatively smaller and narrower; tarsus not so stout. Length up to 26 inches, but averaging less. Culmen 2.85 (72).

Recognition Marks.—As in preceding—distinguishable only by range.

Nesting.—*Nest*: placed on ledge or in crannies of basalt cliffs, more rarely in pine trees.

General Range.—Western United States chiefly west of the Rocky Mountains; in its northerly extension nearly coincident with the Upper Sonoran life zone, south to Honduras.

Range in Washington.—May be arbitrarily defined as restricted to the East-side, but common only on the treeless plains and in the Blue Mountain region. Resident.

Authorities.—*Corvus carnivorus* Bart., **Cooper and Suckley**, Rep. Pac. R. R. Surv. XII. pt. II. 1860, p. 210. Bendire, Life Hist. N. A. Birds, Vol. II. p. 396 f.

It is no mere association of ideas which has made the Raven the bird of ill omen. Black is his wing, and black is his heart, as well. While it may be allowed that he works no direct damage upon the human race, we cannot but share in sympathy the burden of the bird-world which regards him as the *bête noir*, diabolical in cunning, patient as fate, and relentless in the hour of opportunity.

As I sit on an early May morning by the water's edge on a lonely island in the Columbia River, all nature seems harmonious and glad. The Meadow-larks are pricking the atmosphere with goads of good cheer in the sage behind; the Dove is pledging his heart's affection in the cottonwood hard by; the river is singing on the rapids; and my heart is won to follow on that buoyant tide—when suddenly a mother Goose cries out in terror and I leap to my feet to learn the cause. I have not long to wait. Like a death knell comes the guttural croak of the Raven. He has spied upon her, learned her secret, swept in when her precious eggs were uncovered; and he bears one off in triumph,—a feast for his carrion brood. When one has seen this sort of thing a dozen times, and heard the wail of the wild things, the croak of the Raven comes to be fraught with menace, the veritable voice of doom.

To be sure, the Raven is not really worse than his kin, but he is distinguished by a bass voice; and does not the villain in the play always sing bass? Somehow, one never believes the ill he hears of the soulful tenor, even tho he sees him do it; but beware of the bird or man who croaks at low C.

THE MEXICAN RAVEN.

Of all students of bird-life in the West, Captain Bendire has enjoyed the best opportunities for the study of the Raven; and his situation at Camp Harney in eastern Oregon was very similar to such as may be found in the southeastern part of our own State. Of this species, as observed at that point, he says:

"They are stately and rather sedate-looking birds, remain mated thru life, and are seemingly very much attached to each other, but apparently more unsocial to others of their kind. On the ground their movements are delib-



Black Hills, Wyo.

THE RAVEN'S FEED.

(Photograph by Captain Bendire.)

erate and dignified; their walk is graceful and seldom varied by hurried hops or jumps. They appear to still better advantage on the wing, especially in *mate and mate going*, when pairs may be frequently seen playing with each other, performing extraordinary feats in the air, such as somersaults, trying to fly on their backs, etc. At this season they seem to enjoy life most and to give vent to their usually not very exuberant spirits by a *series of low clucking and gurgling notes*, evidently indifferent efforts at singing.

Their solitary call is a loud *Craack-craack*, varied sometimes by a deep

grunting *koerr-koerr*, and again by a clucking, a sort of self-satisfied sound, difficult to reproduce on paper; in fact they utter a variety of notes when at ease and undisturbed, among others a metallic sounding *klunk*, which seems to cost them considerable effort. In places where they are not molested they become reasonably tame, and I have seen Ravens occasionally alight in my yard and feed among the chickens, a thing I have never seen Crows do. * * *

"Out of some twenty nests examined only one was placed in a tree. It was in a good sized dead willow, twenty feet from the ground, on an island



NESTING HAUNT OF THE MEXICAN RAVEN

in Sylvies River, Oregon, and easily reached; it contained five fresh eggs on April 13, 1875. The other nests were placed on cliffs, and, with few exceptions, in positions where they were comparatively secure. Usually the nest could not be seen from above, and it generally took several assistants and strong ropes to get near them, and even then it was frequently impossible to reach the eggs without the aid of a long pole with a dipper attached to the end. A favorite site was a cliff with a southern exposure, where the nest was completely covered from above by a projecting rock."

Having once chosen a nesting site, the Ravens evince a great attachment for that particular locality; and, rather than desert it, will avoid notice by deferring the nesting season, or by visiting the eggs or young only at night.

We have no records of the taking of Raven's eggs in Washington, but it

does unquestionably breed here. A nest was reported to us on a cliff in the Crab Creek Coulee. While we were unable to visit it in season, we did come upon a family group some weeks later, comprising the two adults and five grown young. This is possibly the northernmost breeding station of the Mexican Raven yet reported.

No. 3.

WESTERN CROW.

A. O. U. No. 488b. *Corvus brachyrhynchos hesperis* (Ridgw.).

Synonyms.—CALIFORNIA CROW. COMMON CROW. AMERICAN CROW.

Description.—Entire plumage glossy black, for the most part with greenish blue, steel-blue, and purplish reflections; feathers of the neck normal, rounded. Bill and feet black; iris brown. Length 10.00-20.00; wing 12.00 (30.2); tail 6.70 (17.0); bill 1.83 (46.5); depth at nostril .65 (16.5). Female averages smaller than male.

Recognition Marks.—Distinguishable from Northwest Crow by larger size and clearer voice.

Nesting.—Nest: a neat hemisphere of sticks and twigs carefully lined with bark, roots and trash, and placed 10-60 feet high in trees,—willow, aspen, pine, or fir. *Eggs*: 4-6, usually 5, same coloring as Raven's. Occasionally fine markings produce a uniform olive-green, or even olive-brown effect. Av. size 1.66 x 1.10 (42.2 x 29.5). *Season*: April 15-May 15; one brood.

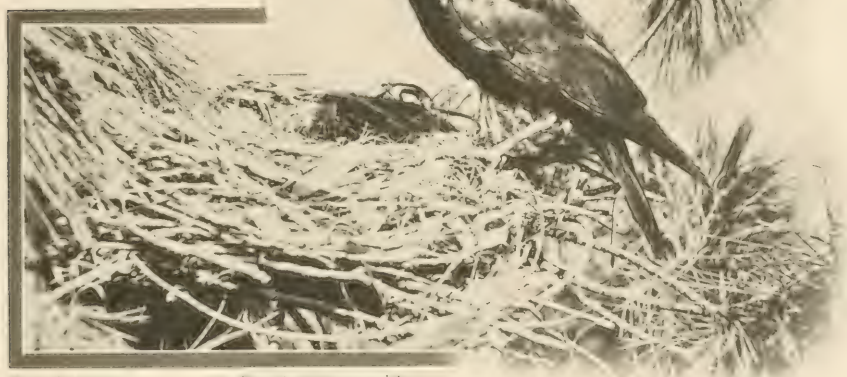
General Range.—Western United States from Rocky Mts. to Pacific Coast, save shores of northwestern Washington, north in the interior of British Columbia, south to Arizona.

Range in Washington.—Of general distribution along streams and in settled portions of State, save along shores of Puget Sound, the Straits, and the Pacific north of Gray's Harbor. Not found in the mountains nor the deeper forests, and only locally on the sage-brush plains.

Migrations.—Resident but gregarious and localized in winter. The winter "roosts" break up late in February.

Authorities.—*Corvus americanus* Aud., **Baird**, Rep. Pac. R. R. Surv. IX, 1858, 2nd part (Proc. Acad. Nat. Sci. Phila. 1857). *Corvus* D. Allen, Ill. Nat. Hist. Soc., 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 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boastings are responsible in large measure for the unsavory reputation in which he is held. It is a familiar adage in ebony circles that the proper study of Crow-kind is man, and so well has he pursued this study that he may fairly be said to hold his own in spite of fierce and ingenious persecution. He rejoices in the name of



WESTERN CROW AT NEST

outlaw, and ages of ill-treatment have only served to sharpen his wits and intensify his cunning.

That the warfare waged against him is largely unnecessary, and partly unjust, has been pretty clearly proven of late by scientists who have investigated the Crow's food habits. It is true that he destroys large numbers of eggs and nestlings, and, if allowed to, that he will occasionally invade the poultry yard—and for such conduct there can be no apology. It is true, also, that some damage is inflicted upon corn in the roasting-ear stage, and that corn left out thru the winter constitutes a staple article of Crow diet. But it is estimated that birds and eggs form only about one-half of one per cent of their total diet; and in the case of grain, certainly they perform conspicuous services in raising the crop. Besides the articles of food mentioned, great

quantities of crickets, beetles, grasshoppers, caterpillars, cut-worms, and spiders, are consumed. Frogs, lizards, mice, and snakes also appear occasionally upon the bill of fare. On the whole, therefore, the Crow is not an economic Gorgon, and his destruction need not largely concern the farmer, altho it is always well to teach the bird a proper reverence.

The psychology of the Crow is worthy of a separate treatise. All birds have a certain faculty of direct perception, which we are pleased to call instinct; but the Crow, at least, comes delightfully near to reasoning. It is on account of his phenomenal brightness that a young Crow is among the most interesting of pets. If taken from the nest and well treated, a young Crow can be given such a large measure of freedom as fully to justify the experiment from a humanitarian standpoint. Of course the sure end of such a pet is death by an ignorant neighbor's gun, but the dear departed is embalmed in memory to such a degree that all Crows are thereafter regarded as upon a higher plane.

Everyone knows that Crows talk. Their cry is usually represented by a single syllable, *caw*, but it is capable of many and important modifications. For instance, *ker-aw, ker-aw*, comes from some irritated and apprehensive female, who is trying to smuggle a stick into the grove; *kack-kack-kack* proclaims sudden danger, and puts the flock into instant commotion; while *caw-aw, caw-aw, caw-aw*, re-assures them again. Once, in winter, when the bird-man, for sport, was mystifying the local bird population by reproducing the notes of the Screech Owl, a company of Crows settled in the tops of neighboring trees, and earnestly discussed the probable nature of the object half-concealed under a camera cloth. Finally, they gave it up and withdrew — as I supposed. It



Taken in
Hendon Co

Exposed by
the Author

NEST AND EGGS OF WESTERN CROW

seems that one old fellow was not satisfied, for as I ventured to shift ever so little from my strained position, he set up a derisive *Ca-a-a-aw* from a branch over my head,—as who should say, "Aw, ye can't fool me. Y're just a ma-a-an," and flapped away in disgust.

Crows attempt certain musical notes as well; and, unless I mistake, the western bird has attained much greater proficiency in these. These notes are deeply guttural, and evidently entail considerable effort on the bird's part. *Hunger-o-o-pe, hunger-o-o-pe*, one says; and it occurs to me that this is allied to the *delary, delary*, or springboard cry, of the Blue Jay (*Cyanocitta cristata*).—plunging notes they have also been called.

Space fails in which to describe the elaborate structure of Crow society; to tell of the military and pedagogical systems which they enforce; of the courts of justice and penal institutions which they maintain; of the vigilantes who visit vengeance upon evil-minded owls and other offenders; or even of the games which they play,—tag, hide and seek, blind-man's-buff and pull-away. These things are sufficiently attested by competent observers; we may only spare a word for that most serious business of life, nesting.

A typical Crow's nest is a very substantial affair, as our illustration shows. Upon a basis of coarse sticks, a mat of dried leaves, grasses, bark-strips, and dirt, or mud, is impressed. The deep rounded bowl thus formed is carefully lined with the inner bark of the willow or with twine, horse-hair, cow-hair, rabbit-fur, wool, or any other soft substance available. When completed the nesting hollow is seven or eight inches across and three or four deep. The expression "Crow's nest," as used to indicate disarray, really arises from the consideration of *old* nests. Since the birds resort to the same locality year after year, but never use an old nest, the neighboring structures of successive years come to represent every stage of dilapidation.

West of the mountains nests are almost invariably placed well up in fir trees, hard against the trunk, and so escape the common observation. Upon the East-side, however, nests are usually placed in aspen trees or willows; in the former case occurring at heights up to fifty feet, in the latter from ten to twenty feet up. Escape by mere elevation being practically impossible, the Crows resort more or less to out-of-the-way places,—spring draws, river islands, and swampy thickets.

Notwithstanding the fact that the spring season opens much earlier than in the East, the Crows, true to the traditions of a northern latitude, commonly defer nesting till late in April. Fresh eggs may be found by the 20th of April, but more surely on the 1st of May. Incubation lasts from fourteen to eighteen days; and the young, commonly five but sometimes six in number, are born naked and blind.

It is when the Crow children are hatched that Nature begins to groan. It is then that birds' eggs are quoted by the crate; and beetles by the hecatomb

are sacrificed daily in a vain effort to satisfy the Gargantuan appetites of these young ebons. I once had the misfortune to pitch camp in a grove of willows which contained a nestful of Crows. The old birds never forgave me, but upbraided me in bitter language from early morn till dewy eve. The youngsters also suffered somewhat, I fear, for as often as a parent bird approached, cawing in a curiously muffled voice, choked with food, and detected me outside the tent, it swallowed its burden without compunction, in order that it might the more forcibly berate me.

If the male happened to discover my out-of-doorness in the absence of his mate, he would rush at her when she hove in sight, in an officious, blustering way, and shout, "Look out there! Keep away! The Rhino is on the rampage again!"

I learned, also, to recognize the appearance of hawks in the offing. At the first sign the Crow, presumably the male, begins to roll out objurgatory gutturals as he hurries forward to meet the intruder. His utterances, freely translated, run somewhat as follows: "That blank, blank Swainson Hawk! I thought I told him to keep away from here. Arrah, there, you slab-sided son of an owl! What are ye doing here? Git out o' this! (Biff! Biff!) Git, I tell ye! (Biff!) If ever I set eyes on ye again, I'll feed ye to the coyotes. Git, now!" And all this without the slightest probability that the poor hawk would molest the hideous young pickaninnies if he did discover them. For when was a self-respecting hawk so lost to decency as to be willing to "eat crow"?

No. 4.

NORTHWEST CROW.

A. O. U. No. 480. *Corvus brachyrhynchos caurinus* (Baird).

Synonyms.—Fish Crow. WESTERN FISH CROW. NORTHWEST FISH CROW. PUGET SOUND CROW. TIDEWATER CROW.

Description.—Similar to *C. b. hesperis*, but decidedly smaller, with shorter tarsus and relatively smaller feet. Length 15.00-17.00; wing 11.00 (280); tail 6.00 (158); bill 1.80 (40); tarsus 1.05 (50).

Recognition Marks.—An undersized Crow. Voice hoarse and flat as compared with that of the Western Crow. Haunts beaches and sea-girt rocks.

Nesting.—*Nest*: a compact mass of twigs and bark-strips with occasionally a foundation of mud; lined carefully with fine bark-strips and hair; 4.00 deep and 7.00 across inside; placed 10-20 feet high in orchard or evergreen trees, sometimes in loose colony fashion. *Eggs*: 4 or 5, indistinguishable in color from those of the

Common Crow, but averaging smaller. A typical set averages 1.56×1.08 (39.6 x 27.4). *Season*: April 15-June 1; one brood.

General Range.—American coasts of the North Pacific Ocean and its estuaries from Olympia and the mouth of the Columbia River north at least to the Alaskan peninsula.

Range in Washington.—Shores and islands of Puget Sound, the Straits of Juan de Fuca, and the West Coast (at least as far south as Moclips, presumably to Cape Disappointment). Strictly resident.

Authorities.—[Lewis and Clark, Hist. Ex. (1814), ed. Biddle: Coues, Vol. II. p. 185.] *Corvus caurinus* Baird, **Baird**, Rep. Pac. R. R. Surv. IX. June 29, 1858, 569, 570. T. C&S. L¹. Rh. Kb. Ra. Kk. B. E.

Specimens.—U. of W. Prov. E. B.

AFTER lengthy discussion it is pretty well settled that the Crow of the northwestern sea-coasts is merely a dwarfed race of the *Corvus brachyrhynchos* group; and that it shades perfectly into the prevailing western type, *C. b. hesperis*, wherever that species occupies adjacent regions. This area of intergradation lies chiefly south and west of Puget Sound, in Washington; for the Crow is ever fond of the half-open country, and does not take kindly to the unmitigated forest depths, save where, as in the case of the Fish Crow, he may find relief upon the broad expanses of shore and tide-flats. The case is quite analogous to that of native man. The larger, more robust types were found in the eastern interior, while those tribes which were confined exclusively to residence upon the sea-shore tended to become dwarfed and stunted; and the region of intergradation lay not chiefly along the western slopes of the Cascades with their crushing weight of tall timber, but in the prairie regions bordering Puget Sound upon the south.

It is impossible, therefore, to pronounce with certainty upon the subspecific identity of Crows seen near shore in Mason, Thurston, Pierce, or even King County; but in Clallam, Jefferson, San Juan, and the other counties of the Northwest, one has no difficulty in recognizing the dwarf race. Not only are these Crows much smaller in point of size, but the voice is weaker, flatter, and more hoarse, as tho affected by an ever-present fog. So marked is this vocal change, that one may note the difference between birds seen along shore in Pierce County and those which frequent the uplands. However,—and this caution must be noted—the upland birds do visit the shore on occasion; and the regular shore dwellers are by no means confined thereto, as are the more typical birds found further north.

The early observers were feeling for these differences, and if Nature did not afford sufficient ground for easy discrimination, imagination could supply the details. The following paragraph from the much quoted work^a of John Keast Lord is interesting because deliciously untrue.

a. "The Naturalist in Vancouver Island and British Columbia," by John Keast Lord. Two Vols. London. Published by Richard Bentley, 1866. Vol. II., p. 70.

"The sea-coast is abandoned when the breeding time arrives early in May, when they resort in pairs to the interior; selecting a patch of open prairie, where there are streams and lakes and where the wild crab apple and white-thorn grows, in which they build nests precisely like that of the Magpie, arched over the top with sticks. The bird enters by a hole on one side but leaves by an exit hole in the opposite. The inside is plastered with mud; a few grass stalks strewn loosely on the bottom keep the eggs from rolling. This is so marked a difference to the Barking Crow's nesting ["Barking Crow" is J. K. L.'s solecism for the Western Crow, *C. b. hesperis*], as in itself to be a specific distinction. The eggs are lighter in blotching and much smaller. I examined great numbers [! !] of nests at this prairie and on the Columbia, but invariably found that the same habit of doming prevailed. After nesting, they return

with the young to the sea-coasts, and remain in large flocks often associated with Barking Crows until nesting time comes again." —No single point of which has been confirmed by succeeding observers.

Dr. Cooper wrote¹ with exact truthfulness: "This fish-crow frequents the coast and inlets of this Territory in large numbers, and



Taken at Neah Bay.

Photo by the Author.

THE PHANTOM CROWS.

is much more gregarious and familiar than the common Crow. Otherwise it much resembles that bird in habits, being very sagacious, feeding on almost everything animal and vegetable, and having nearly the same cries, differing rather in tone than character. Its chief dependence for food being on the sea, it is generally found along the beach, devouring dead fish and other things brought up by the waves. It is also very fond of oysters, which it breaks by carrying them upward and dropping again on a rock or other hard material. When the tide is full they resort to the fields or dwellings near the shore and devour potatoes and other vegetables, offal, etc. They, like the gulls, perceive the instant of change of the tide, and flocks will then start off together for a favorite feeding ground. They are very troublesome to the Indians, stealing

¹ Rep. Pac. R. R. Survey, Vol. XII., Pt. II, [Senate, 1860]

their dried fish and other things, while from superstitious feelings the Indians never kill them but set a child to watch and drive them away. They build in trees near the shore in the same way as the common crow and the young are fledged in May."

Mr. J. F. Edwards, a pioneer of '67, tells me that in the early days a small drove of pigs was an essential feature of every well-equipped saw-mill on Puget Sound. The pigs were given the freedom of the premises, slept in the saw dust, and dined behind the mess-house. Between meals they wandered down to the beach and rooted for clams at low tide. The Crows were not slow to learn the advantages of this arrangement and posted themselves promptly in the most commanding and only safe positions; viz., on the backs of the pigs. The pig grunted and squirmed, but Mr. Crow, mindful of the blessings ahead, merely extended a balancing wing and held on. The instant the industrious rooter turned up a clam, the Crow darted down, seized it in his beak and made off; resigning his station to some sable brother, and leaving the porker to reflect discontentedly upon the rapacity of the upper classes. Mr. Edwards declares that he has seen this little comedy enacted, not once, but a hundred times, at Port Madison and at Albern, V. I.

The Fish Crows have learned from the gulls the delights of sailing the main on driftwood. I have seen numbers of them going out with the tide a mile or more from shore, and once a Crow kept company with three gulls on a float so small that the gulls had continually to strive for position; but the Crow stood undisturbed.



BIRDS AND BOATS AT NEAH BAY.

Photo by the Author.

Speaking of their aquatic tendencies, Mr. A. B. Reagan, of La Push, assures me that he has repeatedly seen them catch smelt in the ocean near shore. These fish become involved in the breakers and may be snatched from above by the dextrous bird without any severe wetting.

Crows are still the most familiar feature of Indian village life. The Indian, perhaps, no longer cherishes any superstition regarding him, but he is reluctant to banish such a familiar evil. The Quillayutes call the bird *Kah-ah-yá*; and it is safe to say that fifty pairs of these Fish Crows nest within half a mile of the village of La Push. They nest, indifferently, in the saplings of the coastal thickets, or against the trunks of the larger spruces, and take little pains to escape observation. The birds are, however, becoming quite shy of a gun. Seeing a half dozen of them seated in the tip of a tall spruce in the open woods, I raised my fowling piece to view, whereupon



THE CROW'S EMB.

flew with frantic cries. Indeed it required considerable maneuvering and an ambushade to secure the single specimen needed.

At Neah Bay the Fish Crows patrol the beach incessantly and allow very little of the halibut fishers' largess to float off on the tide. And the *Oke-tre-ope*, as the Makahs call the birds, have little fear of the Indians, altho they are very suspicious of a strange white man. I once saw a pretty fight on this beach: a three year old Indian girl chasing the Crows about in childish glee. The birds enjoyed the frolic as much as she, and fell in

behind her as fast as she shooed them away in front—came within two or three feet of her, too, and made playful dashes at her chubby legs. But might I be permitted to photograph the scene at, say, fifty yards? *Mit nichten!* Arragh! To your tents, O Israel!

In so far as this Crow consents to perform the office of scavenger, he is a useful member of society. Nor is his consumption of shell-fish a serious matter. But when we come to consider the quality and extent of his depredations upon colonies of nesting sea-birds, we find that he merits unqualified condemnation. For instance, two of us bird-men once visited the west nesting of Baird Cormorants on Flattop, to obtain photographs. As we retired down the cliff, I picked up a broken shell of a Cormorant's egg, from which the white, or plasma, was still dripping. As we pulled away from the foot of the cliff a Crow flashed into view, lighted on the edge of a Shag's nest, seized an egg, and bore it off rapidly into the woods above, where the clamor of expectant young soon told of the disposition that was being made of it. Immediately the marauder was back again, seized the other egg, and was off as before. All this, mind you, in a trice, before we were sufficiently out of range for the Cormorants to reach their nests again, altho they were hastening toward them. Back came the Crow, but the first nest was exhausted; the second had nothing in it; the Shags were on the remainder; moments were precious—he made a dive at a Gull's nest, but the Gulls made a dive at him; and they too hastened to their eggs.

Subsequent investigation discovered rifled egg-shells all over the island, and it was an easy matter to pick up a hatful for evidence. As he is at Flattop, so he is everywhere, an indefatigable robber of birds' nests, a sneaking, thieving, hated, black marauder. It is my deliberate conviction that the successful rearing of a nestful of young Crows costs the lives of a hundred sea-birds. The Baird Cormorant is, doubtless, the heaviest loser; and she appears to have no means of redress after the mischief is done, save to lay more eggs,—more eggs to feed more Crows, to steal more eggs, etc.

No. 5.

CLARK'S NUTCRACKER.

A. O. U. No. 491. *Nucifraga columbiana* (Wils.).

Synonyms.—CLARK'S CROW. PINE CROW. GRAY CROW. "CAMP ROBBER."
(Thru confusion with the Gray Jay, *Perisoreus* sp.).

Description.—*Adults*: General plumage smoky gray, lightening on head, becoming sordid white on forehead, lores, eyelids, malar region and chin; wings glossy black, the secondaries broadly tipped with white; under tail-coverts and four outermost pairs of rectrices white, the fifth pair with outer web chiefly white and the inner web chiefly black, the remaining (central) pair of rectrices and the upper tail-coverts black; bill and feet black; iris brown. Shade of gray in plumage of adults variable—bluish ash in freshly moulted specimens, darker and browner, or irregularly whitening in worn plumage. *Young* like adults, but browner. Length 11.00-13.00; wing 7.00-8.00 (102); tail 4.50 (115); bill 1.60 (40.7); tarsus 1.45 (36.8). Female smaller than male.

Recognition Marks.—Kingfisher size; gray plumage with abruptly contrasting black-and-white of wings and tail; harsh "char-r" note.

Nesting.—*Nest*: basally a platform of twigs on which is massed fine strips of bark with a lining of bark and grasses, placed well out on horizontal limb of evergreen tree, 10-50 feet up. *Eggs*: 2-5, usually 3, pale green sparingly flecked and spotted with lavender and brown chiefly about larger end. *Av. size*, 1.30 x .91 (.33 x .23). *Season*: March 20-April 10; one brood.

General Range.—Western North America in coniferous timber, from Arizona and New Mexico to Alaska; casual east of the Rockies.

Range in Washington.—Of regular occurrence in the mountains thruout the State. Resident in the main but visits the foothills and lower pine-clad levels of eastern Washington at the close of the nesting season.

Authorities.—*Corvus columbianus*, Wilson, Am. Orn. iii. 1811, 29. T. C&S. D. D. J. E.

Specimens.—(U. of W.), Prov. E. C.

NO bird-lover can forget his first encounter with this singular Old-Bird-of-the-Mountains. Ten to one the bird brought the man up standing by a stentorian *char'r'r, char'r'r, char'r'r*, which led him to search wildly in his memory whether Roes are credited with voices. If the bird was particularly concerned at the man's intrusion, he presently revealed himself sitting rather stolidly on a high pine branch, repeating that harsh and deafening cry. The grating voice is decidedly unpleasant at close quarters, and it is quite out of keeping with the unquestioned sobriety of its grizzled owner. A company of Nutcrackers in the distance finds frequent occasion for outcry, and the din is only bearable as it is softened and modified by the re-echoing walls of some pine-clad gulch, or else dissipated by the winds which sweep over the listening glaciers.

Clark's Nutcracker is the presiding genius of the East-side slopes and light-forested foothills, as well as of the rugged fastnesses of the central Cordilleras. His presence, during fall and winter, at the lower altitudes depends in large measure upon the pine-cone crop, since pine seeds are his staple, tho by no means his exclusive diet. This black and white and gray



CLARK'S NUTCRACKER.

"Crow" curiously combines the characteristics of Woodpecker and Jay as well. Like the Lewis Woodpecker, he sometimes hawks at passing insects, eats berries from bushes, or alights on the ground to glean grubs, grasshoppers, and black crickets. In the mountains it shares with the Jays of the *Perisoreus* group the names "meat-bird" and "camp-robber," for nothing that is edible comes amiss to this bird, and instances are on record of its having invaded not only the open-air kitchen, but the tent, as well, in search of "supplies."

Of its favorite food, John Keast Lord says: "Clark's 'Crows' have, like the Cross-bills, to get out the seeds from underneath the scaly coverings constituting the outward side of the fir-cone; nature has not given them

crossed mandibles to lever open the scales, but instead, feet and claws, that serve the purpose of hands, and a powerful bill like a small crowbar. To use the crowbar to advantage the cone needs steadying, or it would snap at the stem and fall; to accomplish this one foot clasps it, and the powerful claws hold it firmly, whilst the other foot encircling the branch, supports the bird, either back downward, head downward, on its side, or upright like a woodpecker, the long clasping claws being equal to any emergency; the cone thus fixed and a firm hold maintained on the branch, the seeds are gouged out from under the scales."

These Nutcrackers are among the earliest and most hardy nesters. They are practically independent of climate, but are found during the nesting months—March, or even late in February, and early April—only where there is a local abundance of pine (or fir) seeds. They are artfully silent at this season, and the impression prevails that they have "gone to the mountains"; or, if in the mountains already, the presence of a dozen feet of snow serves to allay the oölogist's suspicions.

The nest is a very substantial affair of twigs and bark-strips, heavily lined, as befits a cold season, and placed at any height in a pine or fir tree, without noticeable attempt at concealment. The birds take turns incubating and—again because of the cold season—are very close sitters. Three eggs are usually laid, of about the size and shape of Magpies' eggs, but much more lightly colored. Incubation, Bendire thinks, lasts sixteen or seventeen days, and the young are fed solely on hulled pine seeds, at the first, presumably, regurgitated.

If the Corvine affinities of this bird were nowhere else betrayed, they might be known from the hunger cries of the young. The importunate *aiih*, *aiih*, *aiih* of the expectant bantling, and the subsequent *gullii*, *gullii*, *gullii* of median deglutition (and boundless satisfaction) will always serve to bind the Crow, Magpie, and Nutcracker together in one compact group. When the youngsters are "ready for college," the reserve of early spring is set aside and the hillsides are made to resound with much practice of that uncanny yell before mentioned. Family groups are gradually obliterated and, along in June, the birds of the foothills begin to retire irregularly to the higher ranges, either to rest up after the exhausting labors of the season, or to revel in midsummer gaiety with scores and hundreds of their fellows.

No. 6.

PINON JAY.

A. O. U. No. 492. **Cyanocephalus cyanocephalus** (Maxim.).

Synonyms.—BLUE CROW. MAXIMILIAN'S JAY. PINE JAY.

Description.—*Adults:* Plumage dull grayish blue, deepening on crown and nape, brightening on cheeks, paling below posteriorly, streaked and grayish white on chin, throat and chest centrally; bill and feet black; iris brown. *Young* birds duller, gray rather than blue, except on wings and tail. Length of adult males 11.00-12.00; wing 6.00 (154); tail 4.50 (114); bill 1.42 (36); tarsus 1.50 (38). Female somewhat smaller.

Recognition Marks.—Robin size; blue color; crow-like aspect.

Nesting.—Not supposed to nest in State.

General Range.—Piñon and juniper woods of western United States; north to southern British Columbia (interior), Idaho, etc.; south to Northern Lower California, Arizona, New Mexico, and western Texas; casually along the eastern slopes of the Rocky Mts.

Range in Washington.—One record by Capt. Bendire, Fort Simcoe, Yakima Co., June, 1881, "quite numerous." Presumably casual at close of nesting season.

Authorities.—["Maximilian's Nutteracker," Johnson, Rep. Gov. W. T. 1884 (1885), 22.] *Cyanocephalus cyanocephalus* (Wied), **Bendire**, Life Hist. N. A. Birds, Vol. II. p. 425 (1895).

Specimens.—C.

CAPTAIN BENDIRE who is sole authority for the occurrence of this bird in Washington may best be allowed to speak here from his wide experience:

"The Piñon Jay, locally known as 'Nutteracker,' 'Maximilian's Jay,' 'Blue Crow,' and as 'Pinonario' by the Mexicans, is rather a common resident in suitable localities throughout the southern portions of its range, while in the northern parts it is only a summer visitor, migrating regularly. It is most abundantly found throughout the piñon and cedar-covered foothills abounding between the western slopes of the Rocky Mountains and the eastern bases of the Sierra Nevada and Cascade ranges in California, Nevada, and Oregon.

"It is an eminently sociable species at all times, even during the breeding season, and is usually seen in large compact flocks, moving about from place to place in search of feeding grounds, being on the whole rather restless and erratic in its movements; you may meet with thousands in a place to-day and perhaps to-morrow you will fail to see a single one. It is rarely met with at altitudes of over 9,000 feet in summer, and scarcely ever in

the higher coniferous forests; its favorite haunts are the piñon-covered foothills of the minor mountain regions, the sweet and very palatable seeds of these trees furnishing its favorite food during a considerable portion of the year. In summer they feed largely on insects of all kinds, especially grasshoppers, and are quite expert in catching these on the wing; cedar and juniper berries, small seeds of various kinds, and different species of wild berries also enter largely into their bill of fare. A great deal of time is spent on the ground where they move along in compact bodies while feeding, much in the manner of Blackbirds, the rearmost birds rising from time to time, flying over the flock and alighting again in front of the main body; they are rather shy and alert while engaged in feeding. I followed a flock numbering several thousands which was feeding in the open pine forest bordering the Klamath Valley, Oregon, for more than half a mile, trying to get a shot at some of them, but in this I was unsuccessful. They would not allow me to get within range, and finally they became alarmed, took wing, and flew out of sight down the valley. On the next day, September 18, 1882, I saw a still larger flock, which revealed its presence by the noise made; these I headed off, and awaited their approach in a dense clump of small pines in which I had hidden; I had not long to wait and easily secured several specimens. On April 4, 1883, I saw another large flock feeding in the open woods, evidently on their return to their breeding grounds farther north, and by again getting in front of them I secured several fine males. These birds are said to breed in large numbers in the juniper groves near the eastern slopes of the Cascade Mountains, on the head waters of the Des Chutes River, Oregon. I have also seen them in the Yakima Valley, near old Fort Simcoe, in central Washington, in June, 1881, in an oak opening, where they were quite numerous. Their center of abundance, however, is in the piñon or nut-pine belt, which does not extend north of latitude 40°, if so far, and wherever these trees are found in large numbers the Piñon Jay can likewise be looked for with confidence.

"Their call notes are quite variable; some of them are almost as harsh as the '*chaar*' of the Clarke's Nutcracker, others partake much of the gabble of the Magpie, and still others resemble more those of the Jays. A shrill, querulous '*peeh, peeh,*' or '*ahce, ahce,*' is their common call note. While feeding on the ground they kept up a constant chattering, which can be heard for quite a distance, and in this way often betray their whereabouts."

No. 7.

AMERICAN MAGPIE.

A. O. U. No. 475. *Pica pica hudsonia* (Sabine).**Synonym.**—BLACK-BILLED MAGPIE.

Description.—*Adults*: Lustrous black with violet, purplish, green, and bronzy iridescence, brightest on wings and tail; an elongated scapular patch pure white; lower breast, upper abdomen, flanks and sides broadly pure white; primaries extensively white on inner web; a broad band on rump with large admixture of white; tail narrowly graduated thru terminal three-fifths; bill and feet black; iris black. *Young* birds lack iridescence on head and are elsewhere duller; relative length of tail sure index of age in juvenile specimens. Length of adults 15.00-20.00, of which tail 8.00-12.00 (Av. 265); wing 7.85 (200); bill 1.35 (35.); tarsus 1.85 (47).

Recognition Marks.—Black-and-white plumage with long tail unmistakable.

Nesting.—*Nest*: normally a large sphere of interlaced sticks, "as big as a bushel basket," placed 5-40 feet high in willow, aspen, grease-wood or pine. The nest proper is a contained hemisphere of mud 8-10 inches across inside, and with walls 1-2 inches in thickness, carefully lined for half its depth with twigs surmounted by a mat of fine rootlets. *Eggs*: 7 or 8, rarely 10, pale grayish green, quite uniformly freckled and spotted with olive green or olive brown. Occasionally spots nearly confluent in heavy ring about larger end, in which case remainder of egg likely to be less heavily marked than usual. Shape variable, rounded ovate to elongate ovate. Av. size, 1.20 x .88 (30.5 x 22.3). *Season*: March 20-May 1; one brood.

General Range.—Western North America chiefly in treeless or sparsely timbered areas from southern Arizona, New Mexico, and western Texas north to northwestern Alaska. Straggles eastward to west shore of Hudson Bay, and occurs casually in North Central States, Nebraska, etc. Replaced in California west of the Sierras by *Pica nuttalli*.

Range in Washington.—Confined to East-side during breeding season, where of nearly universal distribution. Disappears along east slope of Cascades and does not deeply penetrate the mountain valleys. Migrates regularly but sparingly thru mountain passes to West-side at close of breeding season.

Authorities.—[Lewis and Clark, Hist. Ex. (1814) Ed. Biddle: Cones, Vol. II. p. 185.] *Pica hudsonica* Bonap., **Baird**, Rep. Pac. R. R. Surv. IX. pt. II. (1858), 578. T. C. & S. Rh. D¹. Ra. D². Ss¹. Ss². J. B. E.

Specimens.—(U. of W.) P. Prov. B. E. BN.

HERE is another of those rascals in feathers who keep one alternately grumbling and admiring. As an abstract proposition one would not stake a *sou marquee* on the virtue of a Magpie; but taken in the concrete, with a sly wink and a saucy tilt of the tail, one will rise to his feet, excitedly shouting, "Go it, Jackity," and place all his earnings on this pie-bald steed in the race for avian honors. It is impossible to exaggerate this curious contradiction in Magpie nature, and in our resulting attitude towards it. It is much the same with the mischievous small boy. He has surpassed the

THE AMERICAN MAGPIE

bounds of legitimate naughtiness, and we take him on the parental knee for well-deserved correction. But the saucy culprit manages to steal a roguish glance at us,—a glance which challenges the remembrance of our own boyish pranks, and bids us ask what difference it will make twenty years after; and it is all off with discipline for that occasion.

The Magpie is indisputably a wretch, a miscreant, a cunning thief, a heartless marauder, a brigand bold—Oh, call him what you will! But, withal, he is such a picturesque villain, that as often as you are stirred with righteous indignation and impelled to punitive slaughter, you fall to wondering if your commission as avenger is properly countersigned, and—shirk the task outright.

The cattle men have it in for him, because the persecutions of the Magpie sometimes prevent scars made by the branding iron from healing; and cases are known in which young stock has died because of malignant sores resulting. This is, of course, a grave misdemeanor; but when the use of fences shall have fully displaced the present custom of branding, we shall probably hear no more of it.

Beyond this it is indisputably true that Magpies are professional nest robbers. At times they organize systematic searching parties, and advance



PIE IN GREASEWOOD



SWALLOW - SCOTLAND

thru the sage-brush, poking, prying, spying, and devouring, with the ruthlessness and precision of a pestilence. Not only eggs but young birds are appropriated. I once saw a Magpie seize a half-grown Meadowlark from its nest, carry it to its own domicile, and parcel it out among its clamoring brood. Then, in spite of the best defense the agonized parents could

institute, it calmly returned and selected another

Stick and

Stick

Stick

Stick

Stick



Calaveras County. MAGPIE'S NEST FROM ABOVE. Photo by the Author

man merely deferred the doom of the remaining larks. The Magpie was not likely to forget the whereabouts of such easy meat.

Nor is such a connoisseur of eggs likely to overlook the opportunities afforded by a poultry yard. He becomes an adept at purloining eggs, and make off with his booty with astonishing ease. One early morning, seeing a Magpie fly over the corral with something large and white in his bill, and believing that he had alighted not far beyond, I followed quickly and watched him from a large hen's egg, which bore externally the marks

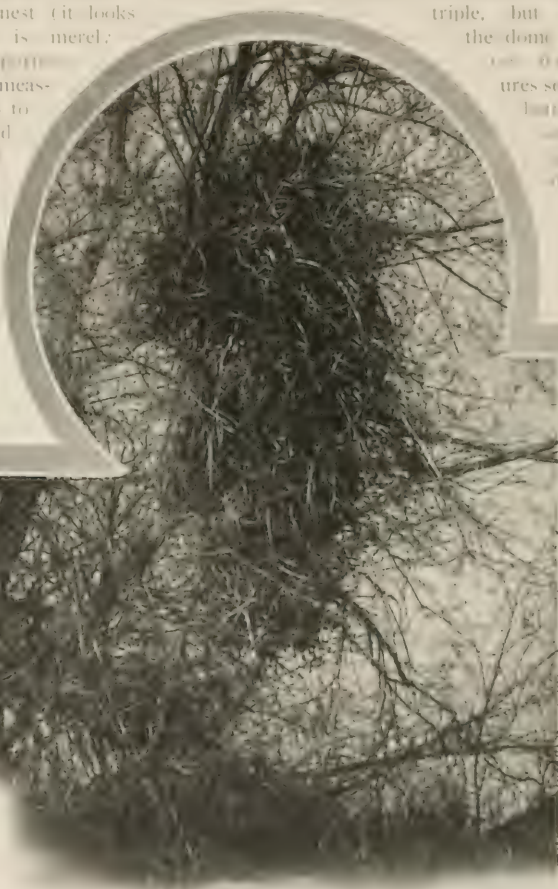
of the bird's bill, but which was unpierced. Of course the only remedy for such a habit is the shot-gun.

To say that Magpies are garrulous would be as trite as to say hens cackle, and the adjective could not be better defined than "talking like a Magpie." The Magpie is the symbol of loquacity. The very type in which this is printed is small *pica*; that is small *Magpie*. Much of this bird's conversation is undoubtedly unfit for print, but it has always the merit of vivacity. A party of Magpies will keep up a running commentary on current events, now facetious, now vehement, as they move about; while a comparative cessation of the racket means, as likely as not, that some favorite raconteur is holding forth, and that there will be an explosion of riotous laughter when his tale is done. The pie, like Nero, aspires to song; but no sycophant will be found to praise him, for he intersperses his more tuneful musings with chacks and barks and harsh interjections which betray a disordered taste. In modulation and quality, however, the notes sometimes verge upon the human; and it is well known that Magpies can be instructed until they acquire a handsome repertoire of speech.

In order that their double quartet of youngsters may be lined up for the egg harvest, the Magpies take an early start at home building. April is the nesting month, but I have two records for March 30th,—one of five eggs at Chelan, and one of eight in Yakima County. In the latter instance the first egg must have been deposited not later than March 18th. And because the season affords him no protection, the Magpie resorts to two expedients in nest building in lieu of concealment: he first seeks retirement, the depths of some lonesome swamp, an unfrequented draw, or wooded spring, in the foothills, and then he erects a castle which would do credit to a feudal baron. The nest is a ball of interlacing sticks set about a hollow half-sphere of dried mud. The amount of labor expended upon one of these structures is prodigious. The greasewood nest shown in the accompanying cut is three feet deep and two feet thru, and the component sticks are so firmly interwoven that no ordinary agency, short of the human hand, can effect an entrance. The bird enters thru an obscure passage in one side, and, if surprised upon the nest, has always a way of escape planned thru the opposite wall. The mud cup is carefully shaped with walls an inch or two in thickness, a total breadth of eight or ten inches, and a like depth. In the best construction this cavity is filled to a depth of three or four inches with a loose mat of fine twigs of a uniform size. Upon this in turn is placed a coiled mattress of fine, clean rootlets, the whole affording a very sanitary arrangement.

Another fortress, of single construction, was four feet deep and three and a half feet thru; and that, too, after making liberal allowance for chance projections. The component sticks measure up to three feet in length and

disquarter it around in darkness. Nests are repaired and re-occupied year after year; or if they fall into hopeless decay, new structures are erected upon the ruins of the old. The tenement photographed on Homely Island is a double nest (it looks triple, but the upper third is merely the dome of a second one), and measures from top to bottom 10 feet. It contained eggs on 8 July 1905, but the oölogist is very fond of little Magpie's eggs, he put those in a tribute to Al and Al's children.



THE ALBINO ALBATROSS (ALBINO) (ALBINO)

ALBINO ALBATROSS

This historic pile is in marked contrast to one sighted in a willow on the banks of Crab Creek near Odessa. My attention was attracted to the spot by a scuffle, which took place between a Magpie and a pair of Kingbirds; and when I started to examine the nest, I was in honest doubt whether it might not belong to the Kingbirds. The foundation was of mud, but this came near constituting the outside of the nest instead of the inside. The action of the wind upon the willows had compressed the mud bowl to a boat-shaped receptacle wherein lay five brown beauties, unmistakable Magpies' eggs. There was a copious lining of rootlets, and a light half-cover of thorn twigs; but the whole structure was not over a foot in diameter and scarcely that in depth.



Taken near Spokane.
Photo by Fred S. Merrill.
YOUNG MAGPIE.

Magpies, like Blue Jays, are discreetly quiet in nesting time, and especially so if they have attempted to nest in the vicinity of a farmhouse. When driven to the hills by persecution they accept any shelter, and will nest in grease-wood, sage-brush, or even on the ground. Arbors of clematis (*clematis ligusticifolia*) offer occasional concealment, but thornapples (*Crataegus columbianum*, etc.) afford the safest retreat. A Magpie snugly ensconced in a thornapple fortress may well bid defiance to any retributive agency short of man. Among several scores of nests I never saw one in a pine tree in the Yakima country, yet these are freely utilized in Chelan, Okanogan, and Spokane Counties. Indeed, in these latter localities there is a suspicion of dawning preference for the tree-tops and difficult climbs. On the Columbia River I once found a family of Magpies occupying the basement of a huge

Osprey's nest, and had reason to believe that the thrifty pies made efficient, if unwelcome, janitors.

Young Magpies are unsightly when hatched,—“worse than naked,” and repulsive to a degree equaled only by young Cormorants. Hideous as they unquestionably are, the devoted parents declare them angels, and are ready to back their opinions with most raucous vociferations. With the possible exception of Herons, who are plebes anyhow, Magpies are the most abusive and profane of birds. When a nest of young birds is threatened, they not only express such reasonable anxiety as any parent might feel, but they denounce, upbraid, anathematize, and vilify the intruder, and decry his lineage from Adam down. They show the ingenuity of Orientals in inventing opprobrious epithets, and when these run dry, they fall to tearing at the leaves, the twigs, the branches, or even light on the ground and rip up the soil with their beaks, in the mad extremity of their rage.

A pair with whom I experimented near Wallula rather fell into the humor of the thing. The Magpie is ever a wag, and these must have known that repeated visits could mean no harm. Nevertheless, as often as I rattled the nest from my favorite perch on the willow tree, the old pies opened fresh vials of wrath and emptied their contents upon my devoted head. When mere utterance became inadequate, the male bird fell to hewing at the end of a broken branch in most eloquent indignation. He wore this down four inches in the course of my three visits. Once, when my attention was diverted, he took a sly crack at my outstretched fingers, which were hastily withdrawn; and, believe me, we both laughed.

The Black-billed Magpie winters practically thruout its breeding range, but it also indulges in irregular migratory movements, which in Washington take the form of excursions to the coast. While never common on Puget Sound, they are not unlikely to occur anywhere here in the fall of the year, and are almost certain to be found somewhere about the southern prairies. They return early in spring by way of the major passes, and are not again seen within the heavily timbered areas during the breeding season. Mr. D. E. Brown, then of Glacier, on the north fork of the Nooksack River, records under date of March 4, 1905, the appearance of several bands of Magpies passing eastward at a considerable height, perhaps something between three and five thousand feet. He says they were unrecognizable until glasses were trained on them, and he thinks he must have seen at least fifty birds, with chances for many more to have passed unobserved.

East or west the Magpie becomes a pensioner of the slaughter house in winter, and his fondness for meat has often proved his undoing in the cattle country. As a scavenger his services are not inconsiderable. The only trouble is, as has been said, that he sometimes kills his own meat.

Volumes could be written of the Magpie as a pet. He is a brainy chap

as well as a wag, and infinitely more interesting than a stupid parrot. Mischievous is his special forte: the untying of shoe-strings, the investigation of cavities, the secreting of spoons, and the aimless abstraction of gold teeth are his unending delight. Once when the writer was shelling seed peas in the garden, a spoiled "Jackity" assayed to fill his (the man's) ears with these innocent pellets; and when he discovered a rent in the knee of the man's trousers, he fairly chortled, "Well; I see myself busy for a week filling *that* hole!"

Cage life is irksome for bird or beast; but, if we must be amused, and, above all, if we feel called upon to pass adverse judgment upon this gifted bundle of contradictions, as he exists in a state of nature, let our harshest sentence be sociable confinement with occasional freedom on parole. A bird in the cage is worth two in the obituary columns.

No. 8.

CALIFORNIA JAY.

A. O. U. No. 481. *Apelocoma californica* (Vigors).

Description.—*Adults*: In general blue, changing to brownish gray on back (scapulars and interscapulars), whitening variously on underparts; crown, hind neck and sides of neck dull cobalt blue, nearly uniform; wings, tail, and upper tail-coverts dull azure blue; cheeks and auriculars cobalt blue and dusky; chin, throat, and chest, centrally, white, the last-named with admixture of blue in streaks, and passing into the clear blue of its sides; breast sordid gray, passing into dull white of remaining underparts; shorter under tail-coverts pure white, the longer ones tinged with pale blue; bill and feet black; iris brown. In *young birds* the blue of adults is supplanted by mouse-gray on head and lower neck, rump, etc., save that crown is tinged with blue; the gray of back is of a deeper shade; the underparts are white, save for light brownish wash across breast and sides. Length of adult males 11.50-12.25; wing 5.00 (127); tail 5.60 (143); bill 1.00 (25.4); tarsus 1.60 (41). Females slightly smaller.

Recognition Marks.—Robin size; blue coloration without crest; whitish underparts.

Nesting.—*Nest*: a bed of small twigs without mud and heavily lined with fine dead grass; 8 inches across outside by $3\frac{1}{2}$ in depth—thus much smaller and lighter than that of the Steller Jay—placed at moderate elevation in tree or bush in thicket near water. *Eggs*: 3-6, usually 4 or 5, deep green of varying shades, spotted with reddish browns. Av. size, 1.11 x .82 (28.2 x 20.8). *Season*: first week in May; one brood.

General Range.—Pacific Coast district of United States, including eastern slopes of the Sierra Nevada and the Cascade Range in Oregon, north to southwestern Washington.

Range in Washington.—Of limited but regular occurrence along the banks of the Columbia west of the Cascades. Resident.

Authorities.—["California Jay," Johnson Rep. Gov. W. T. 1884 (1885), 22]. [Belding, Land Birds Pac. Dist. (1890) p. 111]. *Aphelocoma californica*, Lawrence, Auk, July, 1892, p. 301

Specimens.—C.

THRU the western part of Oregon the breeding limits of the California Jay do not extend as far north as the Columbia River. I have never known of this species nesting about Portland, yet thirty miles south and southwest it is not at all uncommon. Thru the Willamette Valley, one meets this bird about as often as the Steller Jay. The habits of the two jays are much the same, yet the birds are easily distinguished by their dress, the California Jay having more resemblance to the Blue Jay of the Eastern continent lacking the crest, while the Steller Jay has a dark blue and blackish coat with the long crest.

According to popular opinion the California Jay is a bird of but common occurrence. Many people think it does nothing but sit on the ground and eat the berries.



CALIFORNIA JAY.

other birds and feasting on their eggs. This is not true, altho occasionally a Jay will destroy the home of another bird. In Oregon I have often seen this bird feeding on wheat about the edge of the fields after the grain has been cut. Fruit, grain, grasshoppers and other insects make up a large part of his food.

Several years ago I saw a small flock of California Jays along the Columbia River in the dead of winter. During the nesting season the jay is too quiet to show his real character. During the autumn and winter he throws off all restraint, picks up a few mates and goes wandering about from place to place in search of food. The bold and boisterous squawk of the Blue Jay always comes to my ear as a welcome and fitting note to relieve the cold quiet of the winter woods.

One day I was watching several English Sparrows that were feeding on the ground under an oak when a pair of California Jays came flying thru the trees. With a loud squawk one swooped down, with his wings and tail spread and his feathers puffed out as much as possible, evidently expecting to scare the sparrows. He dropped right in their midst with a screech which plainly said, "Get out of here or I'll eat you up alive!" The bluff might have worked with any bird except an Englisher. The Sparrows sputtered in contempt and were ready to fight but the Jay's attitude changed in a second. He took on an air of meekness and unconcern and hopped off looking industriously in the grass for something he had no idea of finding. I thought it a good touch of Jay character.

WILLIAM L. FINLEY.

No. 9.

STELLER'S JAY.

A. O. U. No. 478. *Cyanocitta stelleri* (Gmelin).

Synonyms.—"BLUE JAY." "JAYBIRD."

Description.—*Adults:* Head and neck all around, and back, sooty black, touched with streaks of cerulean blue on forehead, and pale gray on chin and throat, this color passing insensibly into dull blue on breast and rump and richer blue on wings and tail; terminal portion of tail and wings crossed with fine black bars, sharply on secondaries and tertials, faintly or not at all on greater coverts. Bill and feet black; iris brown. *Young birds* are more extensively sooty, and wing-bars are faint or wanting. Length of adults about 12.00; wing 5.90 (150); tail 5.43 (138); bill 1.18 (30); tarsus 1.80 (46).

Recognition Marks.—Robin size; harsh notes; blue and black coloration unmistakable.

Nesting.—*Nest*: a bulky mass of fine twigs thickly plastered centrally with mud and lined with fine rootlets, placed 6-30 feet high in evergreen tree of thicket, or near edge of clearing. *Eggs*: 3-5, usually 4, pale bluish green, uniformly but moderately spotted with olive brown and pale rufous and with numerous "shell-markings" of lavender. Av. size, 1.23 x .90 (31.2 x 22.8). *Season*: April 20-May 10; one brood.

General Range.—North Pacific Coast district from Gray's Harbor and Puget Sound north to Cook's Inlet, except Prince of Wales Island and the Queen Charlotte group (where displaced by *C. s. carlottae*).

Range in Washington.—Entire western portion from summit of Cascades, shading into *C. s. carbonacea* along north bank of the Columbia. Resident.

Authorities.—? *Cyanura stelleri* Swains., **Orn. Com.**, Journ. Ac. Nat. Sci. Phila. VII. 1837, 193. *Cyanocitta stelleri*, Newberry, Rep. Pac. R. R. Surv. VI. pt. IV. 1857, p. 85. T. C&S. L.; Rh. Ra. Kk. B. E.

Specimens.—U. of W. Prov. E. B. BN.

MISCHIEF and the "Blue Jay" are synonymous. Alert, restless, saucy, inquisitive, and provoking, yet always interesting, this handsome brigand keeps his human critics in a perpetual see-saw between wrath and admiration. As a sprightly piece of Nature, the Steller Jay is an unqualified success. As the hero-subject of a guessing contest he is without a peer, for one never knows what he is doing until he has done it, and none may predict what he will do next.

The pioneers are especially bitter against him, and they are unanimous in accusing the bird of malicious destructiveness in the gardens, which are dearer than the apple of the eye during the first years of wilderness life. The birds will eat anything, and so, tiring of bugs and slugs, are not averse to trying corn, cabbage leaves, or, best of all, potatoes. They have observed the tedious operation of the gardener in planting, and know precisely where the coveted tubers lie. Bright and early the following morning they slip to the edge of the clearing, post one of their number as lookout, then silently deploy upon their ghastly task. If they weary of potatoes, sprouting peas or corn will do. Or perhaps there may be something interesting at the base of this young tomato plant. And when the irate farmer appears upon the scene, the marauders retire to the forest shrieking with laughter at the discomfited swain. Ay! there's the rub! We may endure injury but not insult. Bang! Bang!

As a connoisseur of birds' eggs, too, the Steller Jay enjoys a bad eminence. The sufferers in this case are chiefly the lesser song birds; but no eggs whatever are exempt from his covetous glance, if left unguarded. The Jay has become especially proficient in the discovery and sacking of Bush-tits' nests. Mr. D. E. Brown assures me that he has found as high as fifteen nests of this bird in a single swamp, all gutted by Jays. When it is remembered that these busy little workers make one of the handiest nests in the world, the shame of this piracy gets upon the nerves. The investigation of Tits' nests has something of the fascination of the gaming table for the Jay, since

he never knows what the wonder pouches may contain, until he has ripped a hole in the side and inserted his piratical beak.

The dense forests of Puget Sound are not so well patrolled by these feathered grafters as are the forests of the East by the true Blue Jay (*Cyanocitta cristata*). But then our bird has the advantage of denser cover, and we do not know how often we have been scrutinized or shadowed. Upon discovery the Steller Jay sets up a great outcry and makes off thru the thickets shrieking lustily. A favorite method of retreat is to flit up into the lower branches of a fir tree and, keeping close to the trunk, to ascend the succeeding limbs as by a spiral staircase. The bird, indeed, takes a childish delight in this mad exercise, and no sooner does he quit one tree-top than he dashes down to a neighboring tree to run another frenzied gamut.

Owls have abundant cover in western Washington, but should one of them be startled by day, the Steller blue-coat is the first to note the villain's flight. The alarm is sounded and an animated pursuit begins. When the Owl is brought to bay, the deafening objurgation of the Jays is not the least indignity which he is made to suffer. The Jay, in fact, seeks to make the world forget his own offenses by heaping obloquy upon this blinking sinner.

The notes of the Steller Jay are harsh and expletive to a degree. *Shaack, shaack, shaack* is a common (and most exasperating) form; or, by a little stretch of the imagination one may hear *jay, jay, jay*. A mellow *klook, klook, klook* sometimes varies the rasping imprecations and serves to remind one that the Jay is cousin to the Crow. Other and minor notes there are for the lesser and rarer emotions, and some of these not unmusical. Very rarely the bird attempts song, and succeeds in producing a medley which quite satisfies *her* that he could if he would.

C. stelleri, like *C. cristata* again, is something of a mimic. The notes of the Western Red-tail (*Buteo borealis calurus*) and other hawks are reproduced with especial fidelity. For such an effort the Jay conceals himself in the depths of a large-leaved maple or in a fir thicket, and his sole object appears to be that of terrorizing the neighboring song-birds. One such I heard holding forth from a shade tree on the Asylum grounds at Steilacoom. Uncanny sounds are, of course, not unknown here, but an exploratory pebble served to unmask the cheat, and drove forth a very much chastened Blue Jay before a company of applauding Juncoes.

It is well known that the gentleman burglar takes a conscientious pride in the safety and welfare of his own home. Nothing shall molest *his* dear ones. The Jay becomes secretive and silent as the time for nest-building approaches. The nest is well concealed in a dense thicket of fir saplings, or else set at various heights in the larger fir trees. If one but looks at it before the complement of eggs is laid the locality is deserted forthwith. If, however, the enterprise is irretrievably launched, the birds take care not to be seen in

the vicinity of their nest until they are certain of its discovery, in which case they call heaven and earth to witness that the man is a monster of iniquity, and that he is plotting against the innocent.

In our experience, Steller's Jay is not, as has been sometimes reported, a bird of the mountains. To be sure, it may be found in the mountain valleys, but if so it is practically confined to them. The bird, is, however, ubiquitous throught the lowlying countries of Puget Sound, Gray's Harbor, and adjacent regions, giving way only upon the south to the dubious Grinnell Jay (*S. s. carbonacea*).

No. 10.

GRINNELL'S JAY.

A. O. U. No. 478c. *Cyanocitta stelleri carbonacea* J. Grinnell.

Synonyms.—"BLUE JAY." COAST JAY (A. O. U.).

Description.—"Similar to *C. s. stelleri*, but paler throat, and averaging slightly smaller; color of head very nearly as in *C. s. stelleri*, but averaging browner or more sooty, the forehead always conspicuously streaked with blue, and throat more extensively or uniformly pale grayish; back and foreneck much paler, slaty brown or brownish slate, instead of deep sooty; blue of rump, upper tail-coverts, and under parts of body light dull cerulean or verditer blue, advancing more over chest, where more abruptly defined against the sooty or brownish slate color of foreneck" (Ridgway). Adult males: wing 6.10 (150.5); tail 5.51 (140); bill 1.15 (29.1); tarsus 1.75 (44.5).

General Range.—Pacific Coast district from Monterey county, California, north to Columbia River.

Range in Washington.—Has only theoretical status in State, but specimens taken along north banks of Columbia would appear to belong here.

Authorities.—? *Corvus stelleri*, Nuttall, Man. Orn. U. S. and Can. I. 1832, 229 ("Columbia River"). ? Orn. Com. Journ. Ac. Nat. Sci. Phila. VII. 1837, 193. *C. s. frontalis*, R. H. Lawrence, Auk XVII. Oct. 1892, p. 355 (Gray's Harbor). *C. s. carbonacea* Grinnell, **Ridgway**, Birds of No. and Mid. Am. Vol. III, p. 354 (footnote). L. Kb.

ORNITHOLOGY is the furthest refined of the systematic sciences. So zealous have been her devotees and so sagacious her high priests, that no shade of difference in size, form or hue of a bird is allowed to pass unnoticed, or its owner unnamed. It is unquestionably annoying to the novice to be confronted with such subtleties, and the recognition of subspecies in the vernacular names of our birds is of doubtful wisdom; but the fashion is set and we will all be foolish together—so that none may laugh.

The normal range of Grinnell's Jay, as defined, extends northward to the

Columbia River; and since the district lying between the Columbia and Puget Sound presents intergrades between *C. stelleri* and *C. s. carbonacca*, obviously, those Jays which inhabit the southern portion of this debatable ground are better entitled to be called *carbonacca* than *stelleri*.

No. 11.

BLACK-HEADED JAY.

A. O. U. No. 478c. **Cyanocitta stelleri annectens** (Baird).

Synonyms.—"BLUE JAY." PINE JAY. MOUNTAIN JAY.

Description.—*Adults*: Similar to *C. stelleri*, but marked with a small lengthened white spot over eye; streaks on forehead (when present) paler blue or whitish; streaks on chin and upper throat whiter and more distinct; blue areas slightly paler and rather more greenish in tone. Size indistinguishable.

Recognition Marks.—As in *C. stelleri*. White spot over eye distinctive.

Nesting.—As in *C. stelleri*.

General Range.—Eastern British Columbia and the northern Rocky Mountains, south to Wahsatch Range in Utah, west to eastern slopes of Cascade Range in Washington and Oregon.

Range in Washington.—Forests of eastern Washington, shading into typical *stelleri* in Cascade Range. Nearly confined to pine timber.

Authorities.—*Cyanocitta stelleri annectens*, **Brewster**, Bull. Nutt. Orn. Club, Vol. 11, 1882, 229. (C. & S.) D. D. J.

THERE is no such difference of plumage between *C. stelleri* and *C. s. annectens* as is suggested by the name "Black-headed"; but in endeavoring to mark eight shades of difference between tweedledum and tweedledee within the limits of a single species, we are naturally pretty hard put to it for appropriate names. *Annectens* marks the annexion, or welding together, of two branching lines in the *C. stelleri* group. It is the head of the wish-bone, whose divergent arms run down the Sierras to Lower California and along the Rockies to Guatamala respectively.

With a hypothetical center of distribution somewhere in southeastern British Columbia, this subspecies inosculates with *stelleri* in the mountains of that province, and is roughly separated from the western stock by the central ridge of the Cascades, in Washington.

Black-headed Jays in Washington are normally confined to the limits of coniferous timber, being therefore most abundant in the northern portion, in the Blue Mountains, and along the eastern slopes of the Cascades. We have, however, like Bendire, discovered them on occasion skulking in the

willows along creek bottoms some twenty miles from pine timber. On the other hand, they do not assert, with the Gray Jays and Clark Crows, the right to range the mountain heights; but are quite content to maintain their unholy inquisition amidst the groves and thickets of the valley floors.

They are, perhaps, not so noisy as the Steller Jays, being less confident of their cover; and their notes are rather more musical (breath of pines is better than fog for the voice); but for the rest they are the same vivacious, intrepid, resourceful mischief-makers as their kin-folk everywhere.

No. 12.

WHITE-HEADED JAY.

A. O. U. No. 484a. *Perisoreus canadensis capitalis* Ridgw.

Synonyms.—ROCKY MOUNTAIN JAY. "CANADA" JAY. WHISKEY JACK. WISSKACHON. CAMP ROBBER. MOOSE-BIRD. MEAT HAWK. MEAT-BIRD.

Description.—*Adults:* General color plumbeous ash lightening below; whole head white save space about and behind eye connected with broad nuchal patch of slaty gray; wings and tail blackish overlaid with silver gray; tail tipped with white and wings more or less edged with the same. Bill and feet black; iris brown. *Young birds* much darker and more uniform in coloration than adults—slaty gray to sooty slate with lighter crown and some whitish edging on underparts. Length 12.00-13.00; wing 6.00 (152); tail 5.75 (145); bill .82 (21); tarsus 1.38 (35).

Recognition Marks.—Robin size; slaty gray coloration. White of head with its abruptly defined patch of slate on hind neck distinctive as compared with related species of the genus *Perisoreus*.

Nesting.—Has not been reported for Washington but bird undoubtedly breeds in the Kalispell range. *Nest:* in coniferous tree, a large compacted mass of the softest and warmest substances,—twigs for a foundation, then grasses, abundant moss, plant-down and feathers. *Eggs:* 3-5, usually 4, grayish white, spotted and blotched with brown having a tinge of purplish. Av. size 1.15 x .85 (29.2 x 21.6). *Season:* Feb.-April; one brood.

General Range.—Higher ranges of the Rocky Mountain district from British Columbia to Arizona.

Range in Washington.—Mountains of northeastern corner of State and (probably) the Blue Mountains.

Authorities.—["White-headed Jay," Johnson, Rep. Gov. W. T., 1884 (1885) 22.] Ridgway, Birds of North and Middle America, Vol. III, p. 371. ("Sinzoknoteen Depot, etc.").

THE casual observer, camping first on Calispell Peak in Stevens County, and later on Mt. Stuart, in southern Chelan County, might fail to note any

difference in the soberly-dressed Jays, who are the self-appointed overseers of camp economics. For while the birds of the two localities really represent two species, the resemblance in general appearance and behavior is so close as to be virtually negligible afield.

Of this bird in Colorado, Mr. Frank M. Drew has observed^a: "In autumn when on his first tour of inspection around the house he hops along in a curious sidelong manner, just like a school-girl in a slow hurry. White-headed, grave, and sedate, he seems a very paragon of propriety, and if you



Taken near Spokane.

WHITE-HEADED JAY.

Photo by W. H. Wright

appear to be a suitable personage, he will be apt to give you a bit of advice. Becoming confidential he sputters out a lot of nonsense in a manner which causes you to think him a veritable 'Whisky Jack'; yet, whenever he is disposed, a more bland, mind-his-own-business-appearing bird will be hard to find, as will also be many small articles around camp after one of his visits, for his whimsical brain has a great fancy for anything which may be valuable to you, but perfectly useless to him."

^a Bull. Nutt. Orn. Club, Vol. VI., p. 140.

No. 13.

OREGON JAY.

A. O. U. No. 485. *Perisoreus obscurus* (Ridgway).**Synonyms.**—CAMP ROBBER. MEAT BIRD. DEER HUNTER.

Description.—*Adults*.—In general upperparts deep brownish gray; underparts white tinged with brownish; forehead and nasal plumules most nearly clear white; chin, throat, cheeks, auriculars, and obscure band around neck white more or less tinged with brownish; crown and nape sooty brown, nearly black; feathers of back with white shafts more or less exposed; wings and tail drab gray, the former with whitish edging on middle and greater coverts and tertials. Bill and feet black; iris brown. *Young birds* are nearly uniform sooty brown lightening below. Length 10.00-11.00; wing 5.30 (135); tail 5.00 (127); bill .71 (18); tarsus 1.30 (33).

Recognition Marks.—Robin size; brownish gray coloration, familiar, fearless ways. Not certainly distinguishable afield from the next form.

Nesting.—*Nest*: a bulky compacted structure of twigs, plant-fibers and tree-moss with warm lining of fine mosses and feathers, placed well up in fir tree. *Eggs*: 4 or 5, light gray or pale greenish gray spotted with grayish brown and dull lavender. Av. size 1.04 x .79 (26.4 x 20). *Season*: Feb.-April; one brood.

General Range.—Pacific Coast district from Humboldt county, California, north to Vancouver Island. Imperfectly made out as regards following form.

Range in Washington.—Probably the Olympic Mountains and irregularly thru the heavier forests of southwestern Washington.

Authorities.—*P. canadensis* Bonap. **Baird**, Rep. Pac. R. R. Surv. IX, pt. II, 1858, 501 part. Ridgway, Bull. Essex Inst. V, Nov. 1873, 194. (T) C&S. I., Rh. Ra. B. E(7).

Specimens.—U. of W. Prov. E. C.

THE relative distribution of the Oregon Jay and the more recently distinguished Gray Jay is still very imperfectly understood. It would appear probable that this form is the bird of the rainy district, including all lowlands of western Washington, the Olympic Mountains, and the western slopes of the Cascades, and that it gives place to *P. o. griseus* not only upon the heights and eastern slopes of the Cascades, but in the deep valleys which penetrate these mountains from the west.

Certainly it is the Oregon Jay which abounds in the Olympic Mountains, and among the dense spruce forests of the adjoining coasts. While the bird is more abundant on the lowlands in winter, the prevalent opinion that the Oregon Jay is exclusively a bird of the mountains is probably incorrect. Altho bold enough where undisturbed, the birds soon learn caution; and their nests have

been found near Renton where their presence during the breeding season would otherwise have gone unsuspected. The depths of the forest have no terrors for this quiet ghost, and there are other reasons besides color why he remains *the obscure one*.

No. 14.

GRAY JAY.

A. O. U. No. 485a. *Perisoreus obscurus griseus* Ridgw.

Synonyms.—CAMP ROBBER, etc.

Description.—"Similar to *P. o. obscurus*, but decidedly larger (except feet), and coloration much grayer; back, etc., deep mouse gray, instead of brown, reniges and tail between gray (No. 6) and smoke gray, instead of drab gray, and under parts grayish white instead of brownish white." (Ridgway). Length (Av. of three Glacier specimens) 11.16 (283.5); wing 5.82 (147.6); tail 5.48 (139.4); bill .75 (19.0); tarsus 1.25 (31.7).

General Range.—Central mountain ranges of central California, Oregon, Washington, and British Columbia.

Range in Washington.—Thruout the Cascade Mountains and irregularly along their lower slopes west (?) to tidewater.

Authorities.—? *P. canadensis* Bonap., **Baird**, Rep. Pac. R. R. Surv., Vol. IX, pt. II, 1858, p. 591 (Cascade Mts. W. T.). **Ridgway**, Auk, Vol. XVI, July, 1899, 225. Kk. ?

THE "Camp-Robber" appears promptly as interested neighbor and smell-feast before all who invade the precincts of the mountains. The hunter, the trapper, the prospector, the timber cruiser, the mere camper-out, all know him, and they speak well or ill of him according to their kind. The Gray Jay appears to have forsworn the craftiness of his race, and he wins by an exhibition of artless simplicity, rather than by wiles. The bird is mildly curious and hungry—oh, very hungry—but this is Arcadia, and the shepherds draw nigh with never a doubt of their welcome. There is a childlike insouciance about the way in which the bird annexes a piece of frizzled bacon, humbly intended for the man. "'Shoo,' did you say? Why, what do you mean? Can't I have it?" And the bird retires before a flying chip, baffled and injured by such a manifest token of ill-breeding. He complains mildly to his fellows. They discuss the question in gentle *whetters*; generously conclude you didn't mean it, and return unabashed to the quest.

Hunger is the chief characteristic of these docile birds, and no potential food is refused, nuts, acorns, insects, berries, or even, as a last resort, the buds of trees. Meat of any sort has an especial attraction to them; and they are the despair of the trapper because of their propensity for stealing bait.

The hunter knows them for arch sycophants, and he is occasionally able to trace a wounded deer, or to locate a carcass by the movements of these expectant heirs. Says Mr. A. W. Anthony: "While dressing deer in the thick timber I have been almost covered with Jays flying down from the neighboring trees. They would settle on my back, head, or shoulders, tugging and pulling at each loose shred of my coat until one would think that their only object was to help me in all ways possible."

In the higher latitudes "Whisky Jack," in spite of carefully secreted stores, often becomes very emaciated in winter, a mere bunch of bones and feathers, no heavier than a Redpoll. While the Jays of our kindlier clime do not feel so keenly the belly pinch of winter, they have the same thrifty habits as their northern kinfolk. Food is never refused, and a well-stuffed specimen will still carry grub from camp and secrete it in bark crevice or hollow, against the unknown hour of need.



A BACHELOR'S PET

I have never heard the Gray Jay titter more than a soft cooing *zee-ee* repeated at random; but Bendire credits it with a near approach to song^b; and Mrs. Bailey says of the Jays on Mr. Hood^c: "Their notes were pleasantly varied. One call was remarkably like the chirp of a robin. Another of the commonest was a weak and rather complaining cry repeated several times. A sharply contrasting one was a pure clear whistle of one note followed by a three-syllabled call something like *Ka-wé-ah*. The regular rallying cry was still different, a loud and striking two-syllabled *ka-zhee*."

The eggs of the Gray Jay have not yet been reported from this State, but it is known that the bird builds a very substantial nest of twigs, grasses, plant fibre, and mosses without mud, and that it provides a heavy lining of

soft gray mosses for the eggs. The nest is usually well concealed in a fir tree, and may be placed at any height from ten or fifteen feet upward, altho usually at sixty or eighty feet. Only one brood is reared in a season, and family groups hunt together until late in the summer.

No. 15.

COWBIRD.

A. O. U. No. 495. **Molothrus ater** (Bodd.).

Synonyms.—COW BLACKBIRD. CUCKOLD.

Description.—*Adult male*: Head and neck wood-, seal-, or coffee-brown (variable); remaining plumage black with metallic greenish or bluish iridescence. *Female*: Dark grayish brown, showing slight greenish reflections, darkest on wings and tail, lightening on breast and throat. *Young in first plumage*: Like female but lighter below and more or less streaky; above somewhat mottled by buffy edgings of feathers. The young males present a striking appearance when they are assuming the adult black, on the installment plan, by chunks and blotches. Length 7.50-8.00 (190.5-203.2); wing 4.40 (111.8); tail 3.00-3.40 (76.2-86.4); bill .65 (16.5); tarsus .95-1.10 (24.1-27.9). Female, length, wing, and tail one-half inch less.

Recognition Marks.—Chewink size; brown head and black body of male; brown of female.

Nesting.—The Cowbird invariably deposits her eggs in the nests of other birds. *Eggs*: 1 or 2, rarely 3 or 4, with a single hostess, white, often faintly tinged with bluish or greenish, evenly speckled with cinnamon, brown or umber. Av. size, .85 x .65 (21.6 x 16.5), but quite variable. *Season*: April-June.

General Range.—United States from the Atlantic to the Pacific, north into southern British America, south in winter, into Mexico.

Range in Washington.—Of limited but regular occurrence east of the Cascades, increasing; rare or casual in western Washington. Summer resident.

Authorities.—Bendire, Life Histories of N. A. Birds, Vol. II., p. 434. D¹. D². Ss². J. B. E.

Specimens.—C. P.

WHILE I was chatting with my host at milking time (at the head of Lake Chelan in the ante-tourist days), a dun-colored bird with light underparts flew down into the corral, and began foraging as tho to the manor born. One by one the cows sniffed at the stranger and nosed it about, following it up curiously. But the bird only side-stepped or walked unconcernedly ahead. When I returned with the gun, a moment later, I found a calf investigating the newcomer, and it was difficult to separate the creature from bossikin's nose. The date was August 3rd; the bird proved to be a young male

Cowbird in the lightest juvenile phase of plumage, a wail cuckold far from any of his kin, but shifting for himself with the nonchalance which characterizes his worthless kind.

If our hero had lived (and I make no apology for his demise in the first act), he would have exchanged his inconspicuous livery for the rich, iridescent black of the adult; and he would have done this on the installment plan, by chunks and blotches, looking the while like a ragpicker, tricked out in cast-off finery.

In the month of March Cowbirds mingle more or less with other blackbirds in the migrations, but if the main flock halts for refreshments and discussion *en route*, a group of these rowdies will hunt up some disreputable female of their own kind, and make tipsy and insulting advances to her along some horizontal limb or fence rail. Taking a position about a foot away from the coy drab, the male will make two or three accelerating hops toward her, then stop suddenly, allowing the impulse of motion to tilt him violently forward and throw his tail up perpendicularly, while at the same moment he spews out the disgusting notes which voice his passion.

Of the mating, Chapman says: "They build no nest, and the females, lacking every moral instinct, leave their companions only long enough to deposit their eggs in the nests of other and smaller birds. I can imagine no sight more strongly suggestive of a thoroly despicable nature than a female Cowbird sneaking thru the trees and bushes in search of a victim upon whom to shift the duties of motherhood."

The egg, thus surreptitiously placed in another bird's nest, usually hatches two or three days before those of the foster mother, and the infant Cowbird thus gains an advantage which he is not slow to improve. His loud clamoring for food often drives the old birds to abandon the task of incubation; or if the other eggs are allowed to remain until hatched, the uncouth stranger manages to usurp attention and food supplies, and not infrequently to override or stifle the other occupants of the nest, so that their dead bodies are by-and-by removed to make room for his hogship. It is asserted by some that in the absence of the foster parents the young thug forcibly ejects the rightful heirs from the nest, after the fashion of the Old World Cuckoos. I once found a nest which contained only a lusty Cowbird, while three proper fledgelings clung to the shrubbery below, and one lay dead upon the ground.

When the misplaced tenderness of foster parents has done its utmost for the young upstart, he joins himself to some precious crew of his own blood, and the cycle of a changeling is complete.

While not common anywhere west of the Rockies, the Cowbird is no longer rare east of the Cascades, and it is making its appearance at various points on Puget Sound. The earlier writers make no mention of its occur-

rence in Washington, and it seems probable that its presence has followed tardily upon the introduction of cattle. Bendire was the first to report it from this State, having taken an egg near Palouse Falls on June 18, 1878, from a nest of the Slate-colored Sparrow (*Passerella iliaca schistacea*).

Its presence among us is, doubtless, often overlooked because of the superficial resemblance which it bears in note and appearance to Brewer's Blackbird (*Euphagus cyanocephalus*). The note of the former is distinctive,—a shrill, hissing squeak in two tones with an interval of a descending third, uttered with great effort and apparent nausea—honestly, a disgusting sound.

No. 16.

BREWER'S BLACKBIRD.

A. O. U. No. 510. *Euphagus cyanocephalus* (Wagler).

Description.—*Adult male*: Glossy black with steel blue and violet reflections on head, with fainter greenish or bronzy reflections elsewhere; bill and feet black; iris pale lemon yellow or light cream. *Adult female*: Head and neck all around deep brownish gray with violet reflections; underparts brownish slate to blackish with faint greenish iridescence; upperparts blackish, or outright black on wings and tail, which are glossed with bluish-green; bill and feet as in male, but iris brown. *Immature males in first winter plumage* resemble adults but have some edging of pale grayish brown. Length of adult males: 10.00 (254); wing 5.00 (128); tail 3.90 (99); bill .89 (22.6); tarsus 1.27 (32.3). Adult female: length 9.25 (235); wing 4.60 (117); tail 3.50 (89) bill .79 (20); tarsus 1.20 (30.5).

Recognition Marks.—Robin size; pure black coloration and whitish eye of male. Larger than Cowbird (*Molothrus ater*) with which alone it is likely to be confused.

Nesting.—*Nest*: placed at moderate height in bush clump or thicket, less frequently on ground at base of bush, more rarely in cranny of cliff or cavity of decayed tree-trunk, a sturdy, tidy structure of interlaced grasses, strengthened by a matrix of mud or dried cow-dung and carefully lined with coiled rootlets or horsehair. Nests in straggling colonies. *Eggs*: 4-7, usually 5 or 6, presenting two divergent types of coloration with endless variations and intermediate phases. *Light type*: ground color light gray or greenish gray, spotted and blotched with brown of varying shades, walnut, russet, and sepia. (In some examples there is purplish brown scrawling, which suggests the Redwing type. One egg in the writer's collection is indistinguishable from that of a Cowbird, save for size.) *Dark type*: ground color completely obscured by overlay of fine brown dots resulting in nearly uniform shade of mummy brown or Vandyke brown. Av. size 1.03 x .72 (26.2 x 18.3). *Season*: April 20-May 10; one or two broods.

General Range.—Western North America from the plains to the Pacific, and from the Saskatchewan region south to the highlands of Mexico to Oaxaca.

Range in Washington.—Of general distribution thruout the State but found chiefly in more open situations in vicinity of streams and ponds and in cultivated sections. Normally migratory but increasingly resident especially on West-side.

Authorities.—[Lewis and Clark, Hist. Ex. (1814) Ed. Biddle; Coles, Vol. II, p. 185.] *Scolecophagus mexicanus*, Newberry, Rep. Pac. R. R. Surv. VI, pt. IV, 1857, p. 80. (T) C&S, L¹, Rh. D¹, Ra. D², Ss¹, Ss², Kk. J, B, E.

Specimens.—U. of W. Prov. B. E. P.

"BLACKBIRDS" are not usually highly esteemed in the East, where the memory of devastated cornfields keeps the wrath of the farmer warm; but if all species were as inoffensive as this confiding pensioner of the West, prejudice would soon vanish. He is a handsome fellow, our Washington grackle, sleek, vivacious, interesting, and serviceable withal. We know him best, perhaps, as an industrious gleaner of pastures, corrals, streets, and "made" lands. He is not only the farmer's "hired man," waging increasing warfare against insect life, especially in its noxious larval forms, but he has an accepted place in the economy of city and village as well.

As one approaches a feeding flock, he notes the eagerness with which the birds run forward, or rise and flit past their fellows, now diving at a nimble weevil, now leaping to catch a passing bug, but always pushing on until one perceives a curious rolling effect in the total movement.

As we draw near, some timid individual takes alarm, and instantly all are up, to alight again upon the fence or shrubbery where they clack and whistle, not so much by way of apprehension as thru sheer exuberance of nervous force. As we pass (we must not stop short, for they resent express attention) we note the droll white eyes of the males, as they twist and perk and chirp in friendly impudence; and the snuffy brown heads of the females with their soft hazel irides, as they give a motherly fluff of the feathers, or yawn with impatience over the interrupted meal. When we are fairly by, the most venturesome dives from his perch, and the rest follow by tens and tens, till the ground is again covered by a shifting, chattering band



Illustration by J. C. Clark

BREWER'S BLACKBIRDS

Like all Blackbirds, the Brewers are gregarious; but they are somewhat more independent than most, flocks of one or two score being more frequent than those of a hundred. During migrations and in autumnal flocking they associate more or less with Redwings; but, altho they are devoted to the vicinity of water, they care nothing for the fastnesses of reed and rush, which are the delight of Redwing and Yellowhead. Their preference is for more open situations, so that they are most abundant upon the East-side. Here a typical breeding haunt is a strip of willows fringing a swamp; or, better still, a line of dark green thorn-bushes clinging to the bank of the rolling Columbia.

Altho isolated nests may now and then be found, colonies are the rule; and I have found as high as forty nests in a single patch of greenery. There is room, of course, for individual choice of nesting sites, but the community choice is the more striking. Thus, one recalls the greasewood nesting, the rose-briar nesting, the thorn-bush nesting, where all the members of the colony conformed to the locally established rule in nest position. Mr. Bowles records the most remarkable instance of this: One season the nests of the South Tacoma colony were all placed in small bushes, the highest not over four feet from the ground; but in the season following the birds were all found nesting in cavities near the top of some giant fir stubs, none of them less than 150 feet from the ground. On the other hand, in the Usk nesting of 1906, on the placid banks of the Pend d'Oreille, one pair had recessed its nest in a stump at a height of eighteen feet, while three other pairs had sunk theirs into the ground at the base of bushes.

In construction the nest of the Brewer Blackbird varies considerably, but at its best it is quite a handsome affair. Composed externally of twigs, weed-stalks, and grasses, its characteristic feature is an interior mould, or matrix, of dried cow-dung or mud, which gives form and stability to the whole. The lining almost invariably includes fine brown rootlets, but horse-hair is also welcomed wherever available.

The eggs of Brewer's Blackbird are the admiration of oölogists. Ranging in color from clear greenish gray with scattered markings thru denser patterns to nearly uniform umber and chocolate, they are the natural favorites of "series" hunters. The range of variation is, indeed, curious, but it proves to be entirely individual and casual without trace of local or constant differences. Eggs from the same nest are usually uniform in coloration, but even here there is notable diversity. In some instances, after three or four eggs are laid, the pigment gives out, and the remainder of the set is lighter colored. Again, single eggs are heavily pigmented half way, and finished with a clear green ground-color.

Fresh eggs may be taken in the Yakima country during the last week in April, and in one case noted, deposition began on April 14th; but May 1st-15th is the usual rule there and elsewhere. Five eggs is the common set, but six to a clutch is not rare. Of twenty-eight nests examined in Yakima County, May 4, 1906, eleven contained six eggs each; while, of something over two hundred seen altogether, two nests contained seven each.

It is in his notes that the Brewer Blackbird betrays his affinities best of all. The melodiously squeaking chatter of mating time is, of course, most like that of the Rusty Blackbird (*S. carolinus*), but it lacks the bubbling character. He has then the swelling note of the Grackles proper, *fff-weet*, the latter part rendered with some thing of a trill, the former merely as an aspirate; and the whole accompanied by expansion of body, slight lifting of wings, and partial spreading of tail. This note is uttered not only during the courting season, but on the occasion of excitement of any kind. *Kooréé* has a fine metallic quality which promptly links it to the *Keyring* note of the Redwing. *Chup* is the ordinary note of distrust and alarm, or of stern inquiry, as when the bird-man is caught fingering the forbidden ovals. A harsh low rattle, or rolling note, is also used when the birds are squabbling among themselves, or fighting for position.

Unquestionably this species has gradually extended its range within the borders of the State, for the earlier investigators did not regard it as resident on Puget Sound. It has profited greatly and deservedly by the spread of settlement everywhere, and this is especially true of the more open situations. Not a little it owes, also, to the introduction of cattle; for it is as great a rustler about corrals and stamping grounds as its renegade cousin, the Cowbird.



GROUND NEST OF BREWER BLACKBIRD

No. 17.

BULLOCK'S ORIOLE.

A. O. U. No. 508. *Icterus bullockii* (Swainson).

Description.—*Adult male*: Black, white, and orange; bill, lore, a line thru eye, and throat (narrowly) jet black; pileum, back, scapulars, lesser wing-coverts, primary coverts, and tertials chiefly black, or with a little yellowish skirting; remiges black edged with white; middle and greater coverts continuous with edging of tertials and secondaries, white, forming a large patch; tail chiefly yellow but central pair of rectrices black terminally, and remaining pairs tipped with blackish; remaining plumage, including supraloral areas continuous with superciliaries, orange yellow, most intense on sides of throat and chest, shading thru cadmium on breast to chrome on rump, tail-coverts, etc. In *young adults* the orange is less intense and, encroaches upon the black of forehead, hind-neck, etc., altho the tail is more extensively black. *Adult female*: Above drab-gray, clearest on rump and upper tail-coverts; wings fuscous with whitish edging; pattern of white in coverts of male retained but much reduced in area; tail nearly uniform dusky chrome; underparts in general sordid white; chin and lores white; forehead, superciliary, (indistinct), cheeks, hind-neck and chest more or less tinged with chrome yellow. *Young males* resemble the female but soon gain in intensity of yellow on the foreparts, gradually acquiring adult black along median line of throat and in streaks on pileum. Length of adult male about 8.25 (209.5); wing 3.89 (99); tail 3.07 (78); bill .73 (18.5); tarsus .98 (25). Female a little smaller.

Recognition Marks.—Chewink size; black, white, and orange of male distinctive; slender blackish bill of female strongly contrasting with the heavy light-colored bill of female Western Tanager with which alone it is likely to be confused by the novice. General coloration of female ashy or drab rather than olivaceous, yellow of tail contrasting with whitish or light drab of tail-coverts.

Nesting.—*Nest*: a pouch of cunningly interwoven grasses, vegetable fibers, string, etc., 5 to 9 inches deep and lashed by brim to branches of deciduous tree. *Eggs*: usually 5, smoky white as to ground color, sometimes tinged with pale blue, more rarely with faint claret, spotted, streaked and elaborately scrawled with purplish black or dark sepia, chiefly about larger end. Elongate ovate; av. size .94 x .63 (23.9 x 16). *Season*: May 20-June 15; one brood.

General Range.—Western United States, southern British Provinces and plateau of Mexico; breeding north to southern British Columbia, Alberta and southern Assiniboia east to eastern border of Great Plains in South Dakota, Nebraska, etc., south to northern Mexico; in winter south to central Mexico.

Range in Washington.—Regular summer resident in eastern Washington thruout settled sections and along water courses; rare or casual west of Cascades.

Migrations.—*Spring*: Yakima County, May 2, 1900; Moses Lake, May 15, 1906; Chelan, May 21, 1896.

Authorities.—*Icterus bullockii* Bon. **Baird**, Rep. Pac. R. R. Surv. IX, pt. II, 1858, p. 550. T. C&S. D^r, D^r, Ss^t, Ss², J. B.

Specimens.—(U. of W.) Prov. C. P^a.

BIRD of sunshine and good cheer, springtime's ripest offering and emblem of summer achieved, is this happy-hearted creature who flits about the orchards and timber cultures of eastern Washington. The willows of the brook, the cottonwoods and the quaking asps, were his necessary home until the hand of the pioneer made ready the locust, the maple and the Lombardy poplars, which are now his favorite abiding places. And so, for many



BULLOCK'S ORIOLE.

years, the droning of bees, the heavy-scented breath of the acacia, and the high, clear whistling of the Oriole have been associated memories.

A little less dandified than his eastern cousin, the lordly Bird of Baltimore, the Bullock Oriole fulfills much the same economy in habit, song, and nesting as that well-known bird. He is, if anything, a little less muscial, also, and not so conspicuous.

The males arrive a week or two in advance of their mates, and appear quite ill at ease until joined by their shy companions. Marriage compacts have to



Taken near Spokane. Photo by P. S. Merrill.
FEMALE BULLOCK ORIOLE.

be settled at the beginning of the season, but rivalry is chiefly between the under-colored young blades who must make their peace with the sweet girl graduates of the previous year. Orioles are very closely attached to a suitable locality, once chosen, and a group of nests in a single tree presenting successive annual stages of preservation, is fairly eloquent of conjugal fidelity.

The purse-shaped nest of the Bullock Oriole is a marvel of industry and skill, fully equal in these respects to that of the Baltimore Bird. A specimen before me, from a small willow on Crab Creek, in Lincoln County, taken just after its completion, is composed entirely of vegetable fibers, the frayed inner bark of dead willows being chiefly in evidence, while plant-downs of willow, poplar, and clematis are felted into the interstices of the

lower portion. This pouch is lashed at the brim by a hundred tiny cables to the sustaining twigs, and hangs to a depth of six inches, with a mean diameter of nearly three, yet so delicate are the materials and so fine the workmanship, that the whole structure weighs less than half an ounce.

A more bulky, loose-meshed affair, taken at Brook Lake No. 4, in Douglas County, has a maximum depth of nine inches outside, a mean depth of six and a half inches inside, and a greater diameter of five inches.

Near farm houses or in town the birds soon learn the value of string, thread, frayed rope, and other waste materials, and nests are made entirely of these less romantic substances. Occasionally a bird becomes entangled in the coils of a refractory piece of string or horse-hair, and tragedies of Orioles hanged at their own doorstep are of record.

The eggs of this species, four to six in number, are usually of a pale smoky gray color, and upon this ground appear curious and intricate scrawlings of purplish black, as tho made by a fine pen, held unsteadily while the egg was twirled. The purpose of this bizarre ornamentation, if indeed it has any, may be thought to appear where scanty coils of black horse-hair in the lining of the nest show up in high relief against the normal white back-

grounded vegetation etc. I can testify that these dense communities do not give a continuous indistinguishable or even phasic view of the surroundings.

The value of the saucer-shaped nest is less than that in the case of the Baltimore Oriole: a base home is the present search of the blue tree. In the case of the Bullock Oriole is often situated in some low-lying pine grove



FIGURE 1. A large tree in the foreground, with a body of water and distant hills in the background. (Photo by the author.)

which could hide in the wind. Nor is there any such obvious attempt in the case of the bird to provide evidence for placing the eggs out of reach. The female would search about for a moment, and any effort to fasten her would hinder the female's work.

Then at the conclusion of the nest, the unknown Redpolls (Chimney) or the white-bellied partridge (the bird). From this time, more position the nest is (temporarily) changed before they are quite ready to lay the second. Some years ago, a friend of mine, Mr. Olin W. Robinson, of Chelan, secured a Redpoll (Chimney) which he rescued from the nest of the bird where it had evidently just fallen from an overhanging nest. When taken home it proved a male, yet still was given the freedom of the place. Some two weeks ago, one of my friends rescued a nestling from another bird's nest, precisely under circumstances, and put it in a cage with the other bird. The new



BULLOCK ORIOLES
MALE AND FEMALE, AT LIFE SIZE.
FROM A WATER-COLORED DRAWING BY ALAN BIRCHALL



comer had not yet learned to feed himself, but only opened his mouth and called with childish insistence. Judge of the owner's delight, and mine as a witness, when the older bird, himself little more than a fledgeling, began to feed the orphan with all the tender solicitude of a parent. It was irresistibly cunning and heartsome too, for the bird to select with thoughtful, brotherly kindness, a morsel of food, and hop over toward the clamoring stranger and drop it into his mouth; after this to stand back as if to say, "There, baby! how did you like that?" This trait was not shown by a chance exhibition alone, but became a regular habit, which was still followed when the older bird had attained to fly-catching. It upset all one's notions about instinct, and made one think of a golden rule for birds.

No. 18.

CALIFORNIAN BICOLORED BLACKBIRD.

A. O. U. No. 499. *Agelaius gubernator californicus* Nelson.

Description.—*Adult male*: "Uniform deep black, with a faint bluish green gloss in certain lights; lesser wing-coverts rich poppy red or vermilion; middle coverts black, or (if not entirely black) at least broadly tipped with black, the basal portion tawny buff or ochraceous; bill, legs, and feet black; iris brown" (Ridgway). *Adult female in breeding plumage*: Dark sooty brown more or less streaked on crown and back; chin and throat whitish or pinkish buff streaked with brown; faint superciliary stripe composed of narrow whitish streaks on sooty ground. *Adult female in winter*: Feathers more or less edged with rusty. *Immature male*: Lesser wing-coverts partly black, the remaining red not clear, ochraceous-rufous or orange-tawny. Length of adult male: (skins) 8.62 (219); wing 5.78 (136.9); tail 3.67 (93.2); bill .84 (21.3); tarsus 1.28 (32.5). Adult female 6.93 (176); wing 4.27 (108.5); tail 2.82 (71.6); bill .72 (18.3); tarsus 1.10 (27.9).

Recognition Marks.—Like Redwing Blackbird but epaulets *pure red* without exposed buff.

Nesting.—*Nest* and *Eggs* like those of the Northwestern Red-wing. Said to be less prolific.

General Range.—Central and northern coast districts of California north to Washington; straggles irregularly eastward and southward in California in winter.

Range in Washington.—Recorded breeding at Cape Disappointment and may possibly extend north to Gray's Harbor.

Authorities.—*Agelaius gubernator* Bonaparte, **Baird**, Rep. Pac. R. R. Surv. IX, 1858, p. 530 (Columbia River by J. K. Townsend). **Allen**, B. N. O. C. VI, p. 128. R. H. Lawrence, Auk IX, 1892, 45. Kobbé.

WE accept this bird as a resident of this State chiefly on the testimony of William H. Kobbe, who listed it^a as a breeding bird of Cape Disappointment. He found it closely associated with the Northwestern Red-wing (*A. phœniceus caurinus*) altho the latter frequently pursued it in the attempt to expel it from the small swamp which both were compelled to occupy. This probably represents the northernmost extension of this species, the Gray's Harbor record of Mr. Lawrence^b being at least open to question in the matter of identification.

The habits of the Bicolored Blackbird do not differ in any known particular from those of the familiar Red-wing, of which it is a discontinuous offshoot.

No. 19.

COLUMBIAN RED-WING.

A. O. U. No. 498. *Agelaius phœniceus neutralis* Ridgway.

Synonyms.—SAN DIEGO RED-WING. INTERIOR RED-WING. RED-WINGED BLACKBIRD. RED-SHOULDERED BLACKBIRD. SWAMP BLACKBIRD.

Description.—*Adult male in summer:* Glossy black; lesser wing-coverts bright red (poppy-red, vermilion or scarlet); middle coverts buffy or ochraceous-buff—the two forming thus a conspicuous epaulet, or shoulder patch. Bill, legs, and feet horn black; irides brown. *Adult male in winter:* Middle wing-coverts more deeply buffy; scapulars and feathers of black more or less edged with rusty. In *immature males* the black of the plumage is more or less extensively margined with rusty-buffy or whitish; the wing-coverts have an admixture of black and the "red" of the lesser coverts is of a sickly hue (orange-tawny, etc.). *Adult female in summer:* Brownish gray, everywhere mottled and streaked, or striped, with dusky, finely on chin, cheeks, and superciliaries, where also more or less rubescent, heavily below, less distinctly above; lesser coverts brownish-gray or dull red; middle coverts black edged with buffy. Bill dusky lightening below; feet and legs dusky. *Adult female in winter:* Plumage of upperparts more or less margined with rusty or ochraceous; sides of head and underparts tinged with buffy. Length of adult males (skins): 8.39 (213.1); wing 4.84 (122.9); tail 3.57 (90.7); bill .90 (23.1); tarsus 1.10 (30.2). Adult females (skins): 7.11 (181.9); wing 3.98 (101.3); tail 2.85 (72.4); bill .77 (19.6); tarsus 1.06 (26.9).

Recognition Marks.—Chewink to Robin size; bright red epaulets of male; general streakiness of female. Female lighter-colored and not so heavily streaked as in *A. p. caurinus*.

Nesting.—*Nest:* a neatly woven but rather bulky basket of grasses, cat-tail leaves or hemp, usually lashed to upright stalks of cat-tail, occasionally on bushes,

a. The Auk, Vol. XVII., Oct. 1900, p. 354.

b. The Auk, Vol. IX., Jan. 1892, p. 45.

as willow and the like; lining of fine grasses of uniform size. *Eggs*: 4-7, usually 4, light blue to dull grayish blue, scrawled, blotched or clouded with dark purple, purplish brown or black, chiefly about the large end. Av. size 1.04 x .70 (26.4 x 17.8). *Season*: last week in April, June; two broods.

General Range.—Western United States in the interior north to eastern British Columbia, restricted by Rocky Mountains and Cascades in northern portion of range but reaching coast in San Diego and Los Angeles Counties in California and breeding as far east as western Texas, southward to northern Chihuahua and northern Lower California; displaced in Lower Colorado Valley and southern Arizona by *A. p. sonoriensis*; south in winter to southern Texas, etc.

Range in Washington.—Found in all suitable localities east of the Cascades.

Migrations.—Irregularly resident but numbers always greatly augmented about March 1st.

Authorities.—*Agelaius phoeniceus* Vieil., **Cooper and Suckley**, Rep. Pac. R. R. Surv. XII. pt. II. 1860, 207. Allen, Bull. Nutt. Orn. Club, VI. 1881, 128. D¹. D². Ss¹. Ss². J.

Specimens.—U. of W. C. P.

A MEADOWLARK may pipe from a sunny pasture slope in early February, and a Merrill Song Sparrow may rehearse his cheerful message in midwinter, but it takes the chorus of returning Blackbirds to bring boisterous tidings of awakening spring. What a world of jubilation there is in their voluble whistlings and chirpings and gurglings, a wild medley of March which strikes terror to the faltering heart of winter. A sudden hush falls upon the company as the bird-man draws near the tree in which they are swarming; but a dusky maiden pouts, "Who cares?" and they all fall to again, hammer and tongs, timbrel, pipes, and hautboy. Brewer's Blackbirds and Cowbirds occasionally make common cause with Red-wings in the northern migrations, but it is always the last-named who preponderate, and it is they who are most vivacious, most resplendent, and most nearly musical. The Red-wing's mellow *kongqueere* or occasional tipsy *choop-er-away-up* is the life of the party.

Almost before we know it our friends, to the number of a dozen pairs or more, have taken up their residence in a cat-tail swamp—nowhere else, if you please, unless driven to it—and here, about the third week in April, a dozen baskets of matchless weave are swung, or lodged midway of the growing plants. Your distant approach is commented upon from the tops of bordering willows by *keyrings* and other notes. At close range the lordly male, he of the brilliant epaulets and the proper military swagger, shakes out his fine clothes and says, *Kongqueere*, in a voice wherein anxiety is quite outweighed by vanity and proffered good-fellowship withal. But if you push roughly thru the outlying sedges, anxiety obtains the mastery. There is a hubbub in the marsh. Bustling, frowsy females appear and scold you roundly. The lazy gallants are all fathers now, and they join direful threats

to courteous expostulations, as they flutter wildly around the intruder's head. To the mischievous boy the chance of calling out these frantic attentions is very alluring, even when no harm is intended.

I have said that the Red-wing prefers cat-tails for nesting; there is probably no undisturbed area of cat-tails in eastern Washington which does not harbor Columbian Red-wings; yet, even so, the cover does not suffice and they are impelled to occupy the extensive tulé beds which border the larger lakes. For the second nesting, which occurs in June, the Blackbirds are likely



NEST AND EGGS OF THE COLUMBIAN REDWING

to try the willows, now covered with foliage; or, in default of these, may venture into any coarse vegetation which lines the swamp.

Four or five eggs are commonly laid and sets of six are very rare. On the 18th of May, 1896, I took a set of eight eggs, all believed to be the product of one female, from a nest in Okanogan County, and this set is now in the Oberlin College Museum.

Of the economic value of the Red-wing there can be no question. The bird is chiefly insectivorous and destroys an immense amount of insect life.

particularly in the larval state, injurious to vegetation. Its single fault is a weakness for young corn, but as corn is not a staple crop in Washington, this fault may be readily condoned in view of the bird's valuable services to stockman and orchardist.

No. 20.

NORTHWESTERN RED-WING.

A. O. U. No. 498f. *Agelaius phoeniceus caurinus* Ridgway.

Synonyms.—RED-WINGED BLACKBIRD. RED-SHOULDERED BLACKBIRD. MARSH BLACKBIRD. SWAMP BLACKBIRD.

Description.—Similar to *A. p. neutralis* but female much darker, heavily streaked with black below; in winter feather skirtings of female more extensively rusty. Measurements not essentially different.

Recognition Marks.—As in preceding. Female darker and more heavily streaked than in *A. p. neutralis*.

Nesting.—*Nest*: as in preceding; dimensions 5 in. wide by 6 in. deep outside, 3 x 3 inside. *Eggs*: 3 or 4, rarely 5, colored as before; dimensions varying from 1.05 x .76 (26.6 x 19.3) to 1.00 x .66 (25.4 x 16.7). *Season*: second to last week in April, June (Tacoma, April 6, 1906, 3 eggs); two broods.

General Range.—Northwest coast district from northern California north to British Columbia on Vancouver Island and mainland.

Range in Washington.—Common in suitable localities west of the Cascades. Irregularly resident.

Authorities.—*Agelaius phaniceus* Vieil, **Baird**, Rep. Pac. R. R. Surv. IX. 1858, 528. T. C&S. Rh. Kb. Ra. Kk. B. E.

Specimens.—(U. of W.) Prov. B. E.

THE bird-man was sitting Turk-fashion on a great mossy log which ran far out into the rustling depths of the South Tacoma swamp. The April sun flooded the scene with warm light and made one blink like a blissful drowsy frog, while the marsh sent up a grateful incense of curling vapor. A pocket lunch of bread and cheese was the ostensible occasion of this noontide bliss, but victuals had small charms beside those of the sputtering Tulé Wrens who played hide and seek among the stems, or the dun Coots, who sowed their *pulque pulque pulque* notes along the reedy depths.

Upon this scene of marshy content burst a vision of Phœnician splendor, Caurinus I., the military satrap of South Tacoma, the authentic tyee of Blackbirds. He was a well-aged bird, and as is the proper way with feathered folk, resplendent in proportion to his years. His epaulets seemed a half larger again than others, and their scarlet was of the brightest

hue, contrasting with a black mantle which fairly shone. He appeared an amiable old fellow, and as he lighted ponderously on an uplifted branch of my tree, he remarked, "*W'ho-kussee-ung*," so hospitably that I felt impelled to murmur, "Thanks," and assured him of my unhostile intent. "*Conquerree*," he questioned, richly. "Er—well, yes, if you are the conqueror."

But the general had other interests to watch. An upstart male of the second year with shoulder-straps of a sickly orange hue, was descried a rod away climbing hand-over-hand up a cat-tail stem. *Keyring, keyring*, the despot warned him; and because the presumptuous youth did not heed him quickly enough, he launched his splendor over the spot, whereat the youth sank in dire confusion. And next, our hero caught sight of a female fair to look upon peeping at him furtively from behind her lattice of reeds. To see was to act, he flung his heart at the maiden upon the instant, and followed headlong after, thru I know not what reedy mazes. Oh, heart ever young, and pursuit never wearying!

Northwestern Red-wings find rather restricted range thruout western Washington, but they appear wherever there are fresh-water marshes or reed-bordered lakes. In default of cat-tails they will accept the shelter of dwarf willows, or coarse dense grass of any sort.

Nesting is undertaken at Tacoma at least by the third week in April, and we have found eggs as early as the sixth of that month. The nest of the accompanying illustration (photogravure) is composed solely of the coiled stems of the dried bulrushes, amongst which it is placed, with a lining of clean dried grass-stems.

Few eggs exceed in beauty those of the Red-winged Blackbird. The background is a pale bluish green of great delicacy, and upon this occur sharply-defined spots, blotches, marblings, tracteries, and "pen-work" of dark sepia, purplish black, drab, and heliotrope purple. Or a spot of color appears to be deeply imbedded in the fine, strong texture of the shell, and carries about it an aura of diminishing color. Occasionally, the whole egg is suffused with pale brownish, or, more rarely, it is entirely unmarked.

Incubation lasts fourteen days and the young are ready to leave the nest in a little over two weeks more. They are frizzly, helpless, complaining little creatures, but if they cannot fly well they can clamber, and they cling with the grip of terrified monkeys.

Our Northwestern Red-wings are normally migratory, but they also winter with us irregularly; and this habit appears to be gaining ground as the guarantee of food becomes more certain. Numbers of them subsist in both Seattle and Tacoma in the vicinity of grain elevators, where they will have comfortable sustenance until such time as the augmented English Sparrows decree death to all native birds.

No. 21.

YELLOW-HEADED BLACKBIRD.

A. O. U. No. 497. *Xanthocephalus xanthocephalus* (Bonap.).

Description.—*Adult male*: Head, neck all around, and breast orange yellow; lores and feathers skirting eyes and bill, black; a double white patch on folded wing formed by greater and lesser coverts, but interrupted by black of bastard wing; usually a little yellow about vent and on tibiae; the remaining plumage black, dull or subdued, and turning brown on wing-tips and tail. *Female*: Dark brown; line over eye, throat, and upper breast dull yellow. Length 10.00-11.00 (254-279.4); wing 5.30-5.60 (134.6-142.2); tail 4.00-4.50 (101.6-114.3); bill .90 (22); tarsus 1.25 (31.8). Female smaller, length 8.00-9.50 (203.2-241.3).

Recognition Marks.—Robin size; yellow head and breast; white wing-patches.

Nesting.—*Nest*: a bulky but usually neat fabric of dried grasses, reeds or cat-tails lashed to growing ones; 5-7 inches in diameter outside by 5-8 deep; inside deeply cupped. *Eggs*: 3-6, grayish green spotted or clouded with reddish brown, rarely scrawled as in *Agelaius*; elongate ovate in shape. Av. size, 1.10 x .75 (.27.9 x .19). *Season*: May or June; one brood.

General Range.—Western North America from Wisconsin, Illinois and Texas to the Pacific Coast, and from British Columbia and the Saskatchewan River southward to the Valley of Mexico. Accidental in Middle and Atlantic States.

Range in Washington.—Of local distribution in eastern Washington chiefly east of the Columbia River. Rare or casual west of the Cascades. Summer resident.

Authorities.—[“Yellow-headed Blackbird,” Johnson, Rep. Gov. W. T. 1884 (1885), 22.] **Bendire**, Life Hist. N. A. Birds, Vol. II. 1895, p. 447. *Ss^t. J.*

Specimens.—Prov. C. P.

OHI, well for the untried nerves that the Yellow-headed Blackbird sings by day, when the sun is shining brightly, and there are no supporting signs of a convulsion of Nature! Verily, if love affected us all in similar fashion, the world would be a merry mad-house. The Yellow-head is an extraordinary person—you are prepared for that once you catch sight of his resplendent gold-upon-black livery—but his avowal of the tender passion is a revelation of incongruity. Grasping a reed firmly in both fists, he leans forward, and, after premonitory gulps and gasps, succeeds in pressing out a wail of despairing agony which would do credit to a dying catamount. When you have recovered from the first shock, you strain the eyes in astonishment that a mere bird, and a bird in love at that, should give rise to such a cataclysmic sound. But he can do it again, and his neighbor across the way can do as well—or worse. When your nerves have somewhat recovered, modesty

overcomes you, and you retire, not without a chastened sense of privilege that you have lived to hear the Yellow-head pop the question,—“and also you lived after.”

The expiring Romeo cry is quite the finest of the *Nanthocephaline* repertory, but there are others not devoid of interest. *Ok-ch-ah-oh-oo* is a musical series of startling brilliancy, comparable in a degree to the yodelling of a street



Photo by the Author
MALE YELLOW-HEAD.

urchin,—a succession of sounds of varying pitches, produced as tho by altering the oral capacity. It may be noted thus:

The last note is especially mellow and pleasing, recalling to some ears the liquid gurgle of the Bobolink, to which, of course, our bird is distinctly related.

Alternating with the last named, and more frequently heard from the depths of the nesting swamp is *gur, gurrl*; or, as oftenest, *yeei(uk), yeei(uk), gur-gurrl*. In this phrase the *gurrl* is drawn out with comical effect, as tho the gallant were down on his knees before some unyielding maiden.

The Yellow-head's ordinary note of distrust, equivalent to the *dink* note of the Red-wing, is *kluck* or *koluck*. In flight this becomes almost invariably *oo'kluk, oo'kluk*. At rest, again, this is sometimes prolonged

into a thrilling passage of resonant “l” notes, probably remonstratory in character. The alarm cry is built upon the same basis, and is uttered with exceeding vehemence, *klookoloy, klookoloy, klook ooooo*.

Finally, if one may presume to speak finally of so versatile a genius, they have a harsh, rasping note very similar in quality to the scolding note of the Steller Jay, only lighter in weight and a little higher in pitch. This is the note of fierce altercation, or the distress cry in imminent danger. The last time I heard it was in the rank herbage bordering upon a shallow lake in Douglas County. I rushed in to find a big blow-snake coiling just below a nestful of young birds, while the agonized parents and sympathetic neighbors hovered over the spot crying piteously. To stamp upon the reptile was but the work of a moment; and when I dropped the limp ophidian upon the bare ground, all the blackbird population gathered about the carcass, shuddering but exultant, and—perhaps it was only fancy—grateful too.

For all the Yellow-head is so decided in utterance, in disposition he is somewhat phlegmatic, the male bird especially lacking the vivacity which characterizes the agile Brewer Blackbird. Except when hungry, or im-

pelled by passion, he is quite content to mope for hours at a time in the depths of the reeds: and even in nesting time, when his precincts are invaded, he oftener falls to admiring his own plumage in the flooding sun shine than tries to drive off the intruder. Let the homely and distraight female attend to that.



NEST OF YELLOW-HEADED BLACKBIRD IN TULE



A STOUTLY-WOVEN BASKET.

This bird is essentially a plains-loving species, and its favorite haunts with us are the reedy borders of the treeless lakes, and the upland sloughs of eastern Washington. It is highly gregarious, especially in the fall and early spring, but confesses to about the same degree of domesticity as the Red-wing, in late spring and early summer.

The nests are stoutly-woven baskets of reeds and grasses, light and dry and handsome. No mud or other matrix material is used in construction, and the interior is always carefully lined with fine dry grass. The

illimitable bulrushes are the favorite cover, but rank herbage of any sort is used if only it be near or over water. The most humble situations suffice; and the nest is often placed within a foot of the water, or its equivalent of black ooze.

No. 22.

WESTERN MEADOWLARK.

A. O. U. No. 501.1. *Sturnella neglecta* Audubon.

Synonyms.—FIELD LARK. OLD-FIELD LARK. MEDLARK. MEDLAR (poetical). MUDLARK (corruption).

Description.—*Adult male*: General color of upperparts brownish black modified by much tawny and buffy-gray edgings of the feathers which throw the black into stripes and bars with suggestion of herring-bone pattern; the tawny heaviest on secondaries and upper tail-feathers where taking the form of partial bands, a median crown stripe and posterior portion of superciliary sordid white or buffy; anterior portion of superciliary, cheeks, chin, upper throat, breast (broadly) and middle belly rich lemon yellow (inclining to orange in older specimens); a large black crescent on upper breast; sides and flanks black-streaked and spotted with pale brown on a buffy or whitish ground. Bill variegated, tawny, black and white. *Female*: Like male but smaller and paler with some substitutions of brown for black in streaking; black of jugulum veiled by grayish tips of feathers; yellow of breast duller, etc. The plumage of both sexes is duller in fall and winter, the normal colors being restrained by buffy overlay. Length of adult male: 10.00-11.00 (254-279.4); wing 4.85 (123.2); tail 3.00 (76.2); bill 1.30 (33); tarsus 1.46 (37.1). Female smaller.

Recognition Marks.—Robin size; yellow breast with black collar distinctive; general streaky appearance above; yellow cheeks as distinguished from the Eastern Meadowlark (*Sturnella magna*).

Nesting.—*Nest*: on the ground in thick grass or weeds; a slight depression lined (carefully or not) and usually overarched with dried grasses. *Eggs*: 4-6, white, speckled and spotted, sometimes very sparingly, with cinnamon brown or purplish; very variable in shape, elliptical ovate to almost round. Av. size, 1.12 x .80 (28.5 x 20.3). *Season*: April and June; two broods. Tacoma, April 5, 1906, 4 fresh eggs.

General Range.—Western United States, southwestern British Provinces, and northwestern Mexico, east to prairie districts of Mississippi Valley, Minnesota, Iowa, Missouri, etc., occasionally to Illinois and Michigan; breeding thruout its range.

Range in Washington.—Abundant east and west of the Cascades; largely resident on the West-side, partially on the East-side; numbers augmented from the south during last week in February.

Authorities.—[Lewis and Clark, Hist. Ex. (1814), Ed. Biddle: Coues, Vol II, p. 186.] *Sturnella neglecta* Aud., **Baird**, Rep. Pac. R. R. Surv. IX. 1858, 539. T. C&S. L^r. Rh. D^r. Sr. Ra. D^r. Ss^r. Ss^r. Kk. B. E.

Specimens.—(U. of W.) Prov. B. E. BN. P^r.

SUMMER silences the birds so gradually and we ourselves have become so much absorbed in business during the prosy days of September that we

have almost forgotten the choruses of springtime and have come to accept our uncheered lot as part of the established order of things. But on a nippy October morning, as we are bending over some dull task, there comes a sound which brings us to our feet. We hasten to the window, throw up the sash and lean out into the cool, fresh air while a Meadowlark rehearses, all at a sitting, the melodies of the year's youth. It all comes back to us with a rush; the smell of lush grasses, the splendor of apple blossoms, the courage of lengthening days, the ecstasies of courtship—all these are recalled by the lark-song. It is as tho this forethoughted soul had caught the music of a May day, just at its prime, in a crystal vase, and was now pouring out the imprisoned sound in a gurgling, golden flood. What cheer! What heartening! Yea; what rejuvenation it brings! Wine of youth! Splashes of color and gay delight!

It is impossible not to rhapsodize over the Meadowlark. He is a rhapsodist himself. Born of the soil and lost in its embraces for such time as it pleases him, he yet quits his lowly station ever and again, mounts some fence-post or tree-top, and publishes to the world an unquenchable gladness in things-as-they-are. If at sunrise, then the gleams of the early ray flash resplendent from his golden breastplate,—this high-priest of morning; and all Nature echoes his joyous blast: "Thank God for sunshine!" Or if the rain begins to fall, who so quickly grateful for its refreshment as this optimist of the ground, this prophet of good cheer! There is even an added note of exultation in his voice as he shouts: "Thank God for rain!" And who like him can sing farewell to parting day! Piercing sweet from the meadows come the last offerings of day's daysmen, peal and counterpeal from rival friendly throats, unflinching, unfaltering, unsubdued: "It is good to live. It is good to rest. Thank God for the day now done!"

The Meadowlark of the East has a poet's soul but he lacks an adequate instrument of expression. His voice does not respond to his requirement. Perhaps his early education, as a species, was neglected. Certain it is that in passing westward across the prairies of Iowa or Minnesota one notices an instant change in the voices of the Meadowlarks. The song of the western bird is sweeter, clearer, louder, longer and more varied. The difference is so striking that we can explain it only upon the supposition of an independent development. The western bird got his early training where prairie wild flowers of a thousand hues ministered to his senses, where breath of pine mingled faintly with the aroma of neighboring cactus bloom, and where the sight of distant mountains fired the imagination of a poet race. At any rate we of the West are proud of the Western Meadowlark and would have you believe that such a blithe spirit could evolve only under such circumstances.

Bird song never *exactly* conforms to our musical notation, and there is no instrument save the human "whistle" which will even passably reproduce the quality of the Meadowlark's song. Nevertheless, many interesting experiments have been made in recording these songs and a little attention will convince the least accomplished musician that there is a fascinating field for study here.

A formal song of the Western Meadowlark comprises from four to a dozen notes, usually six or seven. The song phrases vary endlessly in detail, yet certain types are clearly distinguishable, types which reappear in different parts of the country, apparently without regard to local traditions or suppositional schools of song. Thus a Chelan singer says, "*Oku wheel'er, ku wheel'er*, and he may not have a rival in a hundred miles; yet another bird on the University campus in Seattle sings, *Eh heu, wheel'iky, wheel'iky*, or even *Eh heu wheel'iky, wheel'iky, wheel'iky*, and you recognize it instantly as belonging to the same type. In like manner *Ozwy'hee, rec'itative* was heard with perfect distinctness both at Wallula and in Okanogan County.

Each bird has a characteristic song-phrase by which he may be recognized and traced thru a season, or thru succeeding years. One boisterous spirit in Chelan I shall never forget for he insisted on shouting, hour after hour, and day after day, "*Hip! Hip! Hurrah! boys; three cheers!*" Yet, while this is true, no bird is confined to one style of song. An autumnal soloist in Ravenna Park rendered no less than six distinct songs or song-phrases in a rehearsal lasting five minutes. He gave them without regard to sequence, now repeating the same phrase several times in succession, now hurrying on to new forms, pausing only after each utterance for breath.

Nor is the effort of the Western Meadowlark confined to the formal song for he often pours out a flood of warbling, chattering and gurgling notes which at close range are very attractive. Not infrequently he will interrupt one of these meditative rhapsodies with the clarion call, and return immediately to his minor theme.

In the presence of a stranger the lark serves frequent notice of intended departure in a vigorous *toop*, or *toob*, accompanying the sound with an emphatic flit of the wings and jerk of the tail. Now and then the actual departure is accompanied by a beautiful yodelling song. After several preliminary *toobs* the bird launches himself with fantastic exaggeration of effort and rolls out, *O'ly o'ly o'ly o'ly o'ly*, with ravishing sweetness.

At nesting time the parent birds have many causes for apprehension, and as they move about in search of food they give vent to the *toob* note of distrust in a fashion which soon becomes chronic. In Douglas County this note is doubled, *two' bit*, or *two' whit*, and one cannot recall the varied life of the sage in June without hearing as an undertone the half melancholy *two' bit* of a mother Meadowlark as she works her way homeward by fearful stages.

At nesting time the Western Meadowlark enjoys a wide distribution in Washington. It is found not only on all grassy foothills and in cultivated sections but in the open sage-hat land and near the half-open pine-clad foothills up to an altitude of four thousand feet.

The Meadowlark is an extremely social bird. This not because of any unusual timidity but because young Meadowlarks are the more easily alarmed of all the powers that prey, hawk, weaselly snake, raven, coyotes, snakes, magpies, crows. Hawks and owls otherwise blameless in the bird-world are here—the game is too sure. Even the white-throated sparrow does not despise the humble, albeit toothsome, quince, and the Least Falcon (*F. a. a. speciosus phoeniceus*) will swoop for a young Meadowlark when all other avian offerings are firm, only partial, or

foundly there is the only recourse—fly, and sometimes, but relying altogether upon its marvellous protective coloration the bird exhibits great caution in approaching, and, if possible, in quitting its nest. In other cases it settles along the ground for a considerable distance, perceiving the danger of this ground so carefully that the human eye can tell how with difficulty it can not at all. At the approach of danger it settles, but may either stand firm, or retreat undisturbed and rise at a safe distance on the wing to further its decoration by singing lament—like the fashion



THE WESTERN MEADOWLARK'S NEST. (FROM THE BIRD BOOK OF 1914, BY THE BIRD BOOK COMPANY, NEW YORK.)

of the Shore-birds. Or, again, she may cling to her charge in desperation hoping against hope till the last possible moment and taking chances of final mishap. In this way a friend of mine once discovered a brooding Meadowlark imprisoned underneath his boot—fortunately without damage for she occupied the deep depression of a cow-track.

To further concealment the grass-lined depression in which the Meadowlark places her four or five speckled eggs is almost invariably over-arched with dried grasses. This renders the eggs practically invisible from above, and especially if the nest is placed in thick grass or rank herbage, as is customary. Touching instances of blind devotion to this arch tradition were, however, afforded by a sheep-swept pasture near Adrian. Here the salt-grass was cropped close and the very sage was gnawed to stubs. But the Meadowlarks, true to custom, had imported long, dried grasses with which to over-arch their nests. As a result one had only to look for knobs on the landscape. By eye alone we located six of these pathetic landmarks in the course of a half-hour's stroll.

One brood is usually brought off by May 1st and another by the middle of June. Altho Meadowlarks are classed as altricial, i. e. having young helpless when hatched and which require to be nurtured in the nest, the young Meadowlarks are actually very precocious and scatter from the nest four or five days after hatching, even before they are able to fairly stand erect. This arrangement lessens the chances of wholesale destruction but it would appear to complicate the problem from the parental standpoint. How would you, for instance, like to tend five babies, each in a separate thicket in a trackless forest, and that haunted by cougars, and lynxes, and boa-constrictors and things?

We cannot afford to be indifferent spectators to this early struggle for existence, for it is difficult to overestimate the economic value of the Meadowlark. The bird is by choice almost exclusively insectivorous. If, however, when hard pressed, he does take toll of the fallen wheat or alfalfa seed, he is as easily justifiable as is the hired man who consumes the farmer's biscuits that he may have the strength to wield the hoe against the farmer's weeds. Being provided with a long and sensitive bill, the Meadowlark not only gleans its insect prey from the surface of the ground, but works among the grass roots, and actually probes the earth in its search for wire- and cut-worms, those most dreaded pests. Besides devouring injurious grubs and insects of many kinds, the Lark has a great fondness for grasshoppers, subsisting almost entirely upon these in the season of their greatest abundance. In the matter of grasshopper consumption alone Meadowlarks of average distribution, are estimated by no less an authority than Professor Beal, to be worth about twenty-four dollars per month, per township, in saving the hay crop. To the individual farmer this may seem a small matter, but in

the aggregate the saving to the nation amounts to some hundreds of thousands of dollars each year. Even in winter, when a few individuals or occasional companies of Larks are still to be found, a large proportion of their food consists of hardy beetles and other insects, while weed-seed and scattering grain is laid under tribute, as it were, reluctantly.

It goes without saying that we cannot regard this bird as lawful game. We exempt the horse from slaughter not because its flesh is unfit for food—it is really very sapid—but because the animal has endeared itself to our race by generations of faithful service. We place the horse in another category, that of animal friend. And the human race, the best of it, has some time since discovered compunctions about eating its friends. Make friends with this bonny bird, the Meadowlark, and you will be ashamed thenceforth to even discuss assassination. Fricassee of *prima donna*! Voice of morning *en brochette*! Bird-of-merry-cheer on toast! Faugh! And yet that sort of thing passed muster a generation ago—does yet in the darker parts of Europe!

No. 23.

WESTERN EVENING GROSBEAK.

A. O. U. No. 514a. *Hesperiphona vespertina montana* Ridgway.

Description.—*Adult male*: Forehead and superciliaries gamboge yellow; feathers about base of bill, lores, and crown black; wings black with large white patch formed by tips of inner secondaries and tertials; tail black; remaining plumage sooty olive brown about head and neck, shading thru olive and olive-green to yellow on wing and under tail-coverts. Bill bluish horn-color and citron yellow; feet brownish. *Adult female*: General color deep smoky brownish gray or buffy brown, darker on the head, lighter on wings, lighter, more buffy, on sides, shading to dull whitish on throat and abdomen, tinged with yellowish green on hind-neck, clearing to light yellow on axillars and under wing-coverts; a small clear white patch at base of inner primaries; white blotches on tips of upper tail-coverts and inner webs of tail-feathers in varying proportions. Length about 8.00 (203.2); wing 4.30 (111.5); tail 2.42 (61.4); bill .82 (20.8); depth at base .62 (15.9); tarsus .81 (20.3). Female very slightly smaller.

Recognition Marks.—Chewink size; olive-brown coloration with black and white in masses on wings; large, conical beak distinctive; high-pitched call note.

Nesting.—Has not yet been found breeding in Washington but undoubtedly does so. *Nest* (as reported from New Mexico): principally composed of fine rootlets with some *Usnea* moss and a few sticks, settled upon horizontal branches of pine or fir, near tip, and at considerable heights; in loose colonies. *Eggs*: 4, "in color, size, form, and texture indistinguishable from those of the Red-winged Blackbird" (Birtwell).

WESTERN EVENING GROSBEAKS

— MALE AND FEMALE IN FALL AND WINTER —

FROM A WATER-COLOR PAINTING BY ALLAN BROOKS



General Range.—Western United States and Northern Mexico; east to and including Rocky Mountains; north to British Columbia.

Range in Washington.—Co-extensive with evergreen timber and appearing irregularly elsewhere. Resident within State but roving locally. Winters regularly in parks of the larger cities.

Authorities.—? *Fringilla vespertina* Townsend, Journ. Ac. Nat. Sci. Phila. VIII. 1839, 154 (Columbia R.). *Hesperiphona vespertina* Baird, Rep. Pac. R. R. Surv. IX. 1858, 409. T. C&S. Ra. Kk. B. E.

Specimens.—U. of W. P¹. Prov. B. E.

SPARROWS are also called Cone-bills; it is, therefore, fair that the bird with the biggest cone should take precedence in a family history. But for this primacy there are damaging limitations. The Grosbeak is neither the most beautiful nor the most tuneful of the Fringillidæ, if he is by common consent rated the oddest. His garb is a patchwork; his song a series of shrieks; his motions eccentric; his humor phlegmatic; and his concepts beyond the ken of man. Altho at times one of the most approachable of birds, he is, on the whole, an avian freak, a rebus in feathers.

Perhaps we make too much of a mystery of him, just as we rate the owl highest in wisdom for the single discretion of silence, which any dunderhead may attain. But now take this group in the park; just what are they at? They sit there stolidly in the rowan tree where all the passersby may take note of them, giving vent ever and anon to explosive yelps, but *doing nothing* by the hour, until an insane impulse seizes one of their number to be off to some other scene no better, be it near or far, and the rest yield shrieking consent by default of alternative idea. It is all so unreasonable, so uncanny, that it irritates us.

Evening Grosbeaks are semi-gregarious the year around, but are seen to best advantage in winter or early spring, when they flock closely and visit city parks or wooded lawns. One is oftenest attracted to their temporary quarters by the startling and disconnected noises which are flung out broadcast. It may be that the flock is absorbed in the depths of a small fir, so that one may come up near enough to analyze the sound. Three sorts of notes are plainly distinguishable: a low murmuring of pure tones, quite pleasant to the ear; a harsh but subdued rattle, or alarm note, *wzzzt* or *wzzzp*, familiarly similar to that of the Crossbill; and the high-pitched shriek, which distinguishes the bird from all others, *dimp*. A little attention brings to light the fact that all the birds in the flock bring out this astonishing note at *precisely the same pitch*. Once distinguished, this note will serve again and again to draw attention to this uncanny fowl, as it passes overhead or loses itself in the bosom of some giant conifer.

It is not a little surprising at first thought, that the habits of these birds are best known in our larger cities, Seattle, Tacoma, Spokane, and Portland. Why they should be especially attracted to them, it is hard to say, unless it be that they love the din of urban life, which they help so valiantly to promote. But it is easy to see why they are more noticeable there; for their showy and patchy coloration marks them as distinguished visitors in town, whereas in the forest their colors so melt into and harmonize with their surroundings that it is difficult to follow their movements.

These Grosbeaks, or New World Hawfinches, are not to be commended as horticulturists. In winter they feed largely upon the ground, gleaning fallen seeds and fruits; and are especially fond of the winged key of the large-leaved maple (*Acer macrophyllum*). They drop down to such a feast one by one from the branches above, and it is amusing to note how the loud cracking of seeds is interspersed with music. A little later the birds devote themselves to swelling buds, and here too the maple is a favorite; tho ash, alder, flowering currant, and a dozen more are not disclaimed. The damage done is not considerable; for the birds, viewed in the large, are not numerous enough, all told, to be taken seriously; but viewed in the concrete, the snip, snip, of those mandibles in the lilac bushes is no idle joy.

It may be that the key of high C sharp, or whatever it be, *staccato con moto*, is the accepted love note, and that the green-liveried swain hurls declarations at his enamorata, like Samson in Handel's oratorio, the live-long year. Anyway, his exertions are redoubled in early June, and he charges about in a reckless frenzy which should make the city gape. June, 1906, was memorable to us for the abundance of these Grosbeaks in the vicinity of Spokane. The very air of Cannon Hill and Hangman's Creek seemed charged with expectation of Grosbeaks' nests. But they were not for us. Nor has the nest yet been taken in Washington.

No. 24.

ALASKAN PINE GROSBEAK.

A. O. U. No. 515c. *Pinicola enucleator alascensis* Ridgway.

Synonym.—PINE BULLFINCH.

Description.—*Adult male*: In highest plumage rosy red (poppy red); back with dusky centers of feathers; lower belly and under tail-coverts ashy gray—this high plumage is the exception; in general the rosy gives place to ashy gray in varying proportions; wings and tail ashy dusky; tips of middle and greater coverts and outer edges of exposed tertials white (or rosy). Bill dusky; feet blackish. *Adult female*: Similar to male but rosy replaced by dingy yellow (vary-

ing from olive-yellow, olive-tawny and ochraceous to brick red) and chiefly confined to head, hind-neck and upper tail-coverts (where brightest); feathers of back frequently tipped with ochraceous and breast with an ochrey wash. Length about 8.60 (218.4); wing 4.60 (117); tail 3.66 (93); bill .57 (14.5); tarsus .89 (22.7).

Recognition Marks.—Chewink size; large, rounded conical beak; red and gray coloration for size distinctive.

Nesting.—"Nest, composed of a basement of twigs and rootlets within which is a more compact fabric of finer materials. Eggs, usually 4, pale greenish blue, spotted and blotched with dark brown surface markings and lilac shell-spots." Av. size 1.05 x .74 (26.7 x 18.8). Season: About June 1st; one brood.

General Range.—"Northwestern North America, except Pacific Coast, breeding in interior of Alaska; south, in winter, to eastern British Columbia, Montana (Bitterroot Valley), etc." (Ridgway).

Range in Washington.—Reported by Allan Brooks as breeding in the Mt. Baker district (as below); should occur upon the timbered lowlands in winter.

Authorities.—Allan Brooks in *epist.* Dawson, Auk Vol. XXV. Oct. 1908, p. 482.

Specimens.—Prov.

THIS large and handsome Finch is of very irregular occurrence in southern British Columbia excepting the higher mountain ranges, where it breeds. During some winters it is present in large numbers, while in others, equally severe, none are seen. The species was very common throughout the winter of 1906-1907, a very severe one; but in that of 1901-1902, which was notably mild, Pine Grosbeaks were noticed in considerable numbers as far south as Penticton, 40 miles north of the international boundary, and they undoubtedly occurred much farther south.

Their food in the winter months is principally berries, but, strange to say, they altogether refuse those of the mountain ash, both the introduced and indigenous species. The former is the favorite food of the Eastern Pine Grosbeak thruout the winter in Ontario, but trees loaded with fruit were passed by at Okanagan Landing in the winter of 1906-1907, even after the birds had eaten all the rose hips and snow berries and were reduced to eating weed seeds with the *Leucostictes*.

Either this sub-species or *montana* breeds on all the higher mountain ranges in British Columbia, occupying a zone from timber line downwards about 2,000 feet.

My first acquaintance with the Pine Grosbeak at its breeding grounds, was in the Cascade Mountains due north of Mt. Baker, on both sides of the Forty-ninth Parallel. Here the species was a somewhat sparing breeder close to timber line among the hemlock and balsam timber. They were feeding young on the 17th of July; at the same time Crossbills had fully

grown young in flocks. No red males were seen, though many gray males were singing in the early mornings from the topmost spray of some balsam.

In the writer's opinion the red plumage in the male is acquired at the first moult or immediately after the juvenal dress, and is usually only retained for one season; in some males a duller red dress is carried through the second summer, or more rarely a salmon-pink one; but in most cases the dress of the second summer is a gray one like the females, with yellow head and rump. Females may sometimes be seen with decidedly red heads and rumps,—from the size and shape of the bill these seem to be very old birds. The above remarks as to the red dress in the male apply also, in the writer's experience, to the genera *Loxia*, *Carpodacus* and *Acanthis*.

ALLAN BROOKS.

No. 25.

AMERICAN CROSSBILL.

A. O. U. No. 521. *Loxia curvirostra minor* (Brehm.).

Synonym.—RED CROSSBILL.

Description.—*Adult male*: Tips of mandibles crossed either way; plumage red, brightest on rump; feathers of back with brownish centers; wings and tail fuscous. Shade of red very variable,—orange, cinnabar, even vermilion, sometimes toned down by a saffron suffusion. *Immature males* sometimes present a curiously mottled appearance with chrome-green and red intermingled. *Female and young*: Dull olive-green, brighter and more yellow on head and rump; below gray overcast by dingy yellow. *Adult male*, length 5.50-6.25 (139.7-158.8); wings 3.40 (86.4); tail 2.05 (52.1); bill .70 (17.8) or under.

Recognition Marks.—Sparrow size; crossed mandibles; male red and female olive-green; both without white wing-bars.

"Nest: in forks or among twigs of tree, founded on a mass of twigs and bark-strips, the inside felted of finer materials, including small twigs, rootlets, grasses, hair, feathers, etc. *Eggs*: 3-4, 0.75 x 0.57, pale greenish, spotted and dotted about larger end with dark purplish brown, with lavender shell-markings" (Coles). *Av. size*, .85 x .53 (21.6 x 13.5) (Brewer). *Season*: erratic, Feb.-Oct.; one brood.

General Range.—Northern North America, resident sparingly south in the eastern United States to Maryland and Tennessee, and in the Alleghanies, irregularly abundant in winter. Of irregular distribution thruout the coniferous forests of the West, save in southern California, Arizona, and New Mexico, where replaced by *L. c. stricklandi*.

Range in Washington.—Found thruout the coniferous forests of the State; of irregular occurrence locally. Non-migratory but nomadic.

Authorities.—*Curvirostra americana* Wils. **Baird**, Rep. Pac. R. R. Surv. IX, pt. II, 1858, 426 part, 427. T. C&S, L. D. Ra. D. J. B. E.

Specimens.—U. of W. Prov. E. B.

WHEN a bird's pastures are the tree-tops it is possible for it to live a quite secluded life here in Washington. And, indeed, we know the Crossbill chiefly as a wandering voice or, rather, a vocal babel, passing from summit to summit in the grim fir forest. But on a rare day, it may be in Spokane, or it may be in Tacoma, the birds descend to human levels and are discovered feeding busily on their favorite pine cones. The birds are perfectly indifferent to equilibrium, and feed any side up without care. While thus engaged they may exhibit little fear of the beholder and sometimes venture within reach; but as often, for some whimsical reason they are up and away again as tho seized by evil spirits.

The Crossbill owes its peculiar mandibles to an age-long hankering for pine-seeds (using that word in the generic sense), a desire fully satisfied according to the fashion of that Providence which works so variously thru Nature, and whose method we are pleased to call evolution. The bill of the bird was not meant for an organ of prehension, and Buffon, the Deist, once won a cheap applause by railing at the Almighty for a supposed oversight in this direction; but as matter of fact, its wonderful crossed mandibles enable the Crossbill to do what no other bird can; viz., pry and cut open the scales of a fir cone, in order to extract the tiny seed with its tongue.

These birds are not entirely confined to a vegetable diet, for I once detected a group of them feeding industriously in a small elm tree which was infested with little gray insects, plant-lice or something of the sort. The presence of these insects, in colonies, caused the edges of the leaves to shrivel and curl tightly backward into a protective roll. Close attention showed that the Crossbills were feeding exclusively upon these aphides. They first slit open a leaf-roll with their scissor-bills, then extracted the insects with their tongues, taking care apparently to secure most of the members of each colony before passing to the next.

Crossbills also feed to some extent upon the ground, where they pick up fallen seeds and other tidbits. Mr. J. F. Galbraith, a ranger of the Washington Forest Reserve, first called my attention to another purpose which the birds have in visiting the ground. He had noticed how at certain places, and notably where dish-water was habitually thrown, the Crossbills were wont to congregate, and, turning the head sidewise, to thrust out the tongue along the bare ground in a most puzzling manner. Suspecting at last the real state of affairs, he sprinkled the ground with salt, and upon their return the birds licked it up with great avidity. Mr. Galbraith claims to have tried this experiment successfully upon numerous occasions. The birds do not appear to recognize the salt at first sight, but soon learn to resort to established salt-licks in open places. Rev. Fred M. McCreary also reports similar habits in connection with certain mineral springs in the Suiattle country.

When we recall that the normal food of the Crossbill is pine-seeds, this craving for Nature's solvent is readily understandable.

Crossbills give out an intermittent rattling cry, or excited titter, *tere, tere, tere*, while feeding. They have also a flight note which consists of a short, clear whistle; and a flock composed of separately undulating individuals affords a pleasing sensation to both eye and ear, as it rapidly passes. The male is said to have sprightly whistling notes of a most agreeable character, generically related to that of the Pine Grosbeak, or Purple Finch, but their exhibition must be rather rare.

After all, there is something a bit uncanny about these cross-billed creatures, and their eccentricities show nowhere in greater relief than in their nesting habits. The quasi migrations of the bird are determined by the local abundance of fir (or pine) cones. Like their food supply, the birds themselves may abound in a given section one year and be conspicuously absent the next. Moreover, because there is no choice of season in gathering the seed crop, the birds may nest whenever the whim seizes them; and this they do from January to July, or even October. The communal life is maintained in spite of the occasional defection of love-lorn couples; and there is nothing in the appearance of a flock of Crossbills in April to suggest that other such are dutifully nesting.

Mr. Bowles has never taken the eggs near Tacoma, altho he has encountered half a dozen of their nests in twelve years, the only occupied one of which we have record being found by a friend on the 25th of April, 1899. It contained three half-incubated eggs, and was placed in one of a group of small firs in the prairie country, at an elevation of some twenty feet. The nest rather closely resembles that of the California Purple Finch, but is more compactly built and much more heavily lined. It is composed of twigs and rootlets closely interwoven, and boasts an inner quilt of felted cow-hair nearly half an inch in thickness. The female Crossbill exhibits a singular devotion to duty, once confessed, and in this case the collector had actually to lift her from the eggs in order that he might examine them.

No. 26.

WHITE-WINGED CROSSBILL.

A. O. U. No. 522. *Loxia leucoptera* Gmel.

Description.—*Male*: Rosy-red or carmine all over, save for grayish of nape and black of scapulars, wings, and tail. The black of scapulars sometimes meets on lower back. Two conspicuous white wing-bars are formed by the tips of the middle and greater coverts. Bill slender and weaker than in preceding

species. *Female and young*: Light olive-yellow, ochraceous, or even pale orange over gray, clearer on rump, duller on throat and belly; most of the feathers with dusky centers, finer on crown and throat, broader on back and breast; wings and tail as in male, but fuscous rather than black; feather-edgings olivaceous. Very variable. Length 6.00-6.50 (152.4-165.1); wing 3.50 (88.9); tail 2.25 (57.2); bill .67 (17).

Recognition Marks.—Sparrow size; crossed bill; conspicuous white wing-bars of both sexes.

Nesting.—*Nest* has not yet been taken in Washington but bird undoubtedly breeds here. "*Nest*: of twigs and strips of birch-bark, covered exteriorly with moss (*Usnea*) and lined with soft moss and hair, on the fork of an evergreen, in deep forests. *Eggs*: 3 (?), pale blue, spotted and streaked near larger end with reddish brown and lilac, .80 x .55 (20.3 x 14)" (Chamberlain). *Season*: Feb.-March.

General Range.—Northern parts of North America and southern Greenland, south into the United States in winter. Resident in coniferous timber thru the entire northern tier of states and irregularly south in the mountains at least to Colorado. Casual in western Europe.

Range in Washington.—Several records of occurrences in northern Cascade Mountains. Doubtless regular and resident.

Authorities.—Dawson, *Auk*, Vol. XVII. Oct., 1901, p. 403. D².

Specimens.—(U. of W.) Prov. C. B.

TO TELL the truth, no one hereabouts appears to know much about the White-winged Crossbill. It is presumed to be common in the Cascade Mountains, but I have only thrice encountered it: once, May 15, 1891, in the mountains of Yakima County; again, July 23, 1900, on the slopes of Wright's Peak near the head of Lake Chelan; and lastly, on the summit of Cascade Pass, June 25, 1906. There are no other records.^a This species is quite as erratic as its more common cousin; and while it is, perhaps, more nearly confined to the mountains, it should be looked for wherever *C. minor* occurs, and especially in flocks of the latter species.

Of the bird's occurrence in Alaska, where it is much more abundant, Nelson says^b: "It is more familiar than the Grosbeak [i. e., *Pinicola enucleator alascensis*], frequently coming low down among the smaller growth, and it is a common sight to see parties of them swinging about in every conceivable position from the twigs on the tops of the cottonwoods or birch trees, where the birds are busily engaged in feeding upon the buds. They pay no heed to a passing party of sleds, except, perhaps, that an individual will fly down to some convenient bush, where he curiously examines the strange procession, and, his curiosity satisfied or confidence restored, back he goes to his companions and continues feeding. When fired at they utter

a. Since writing the above specimens have been taken at Kirkland by Miss Jennie V. Getty (Dec. 1908).

b. Rep. Nat'l Hist. Coll. in Alaska, pp. 174, 175.

chirps of alarm and call to each other with a long, sweet note, something similar to that of the Goldfinch (*Spinus tristis*). They keep up a constant *cheeping* repetition of this note when feeding in parties, and if one of their number is shot the others approach closer and closer to the hunter, and gaze with mingled curiosity and sympathy upon their fluttering companion."

No. 27.

GRAY-CROWNED LEUCOSTICTE.

A. O. U. No. 524. *Leucosticte tephrocotis* Swains.

Synonyms.—ROSY FINCH. SWAINSON'S ROSY FINCH.

Description.—*Adults*: Similar to *L. t. littoralis* but ashy gray of head restricted to sides of crown and occiput—in worn plumages black of crown produced backward to meet brown of hind neck. Seasonal changes as in succeeding. Size of nest.

Recognition Marks.—Sparrow size; warm brown plumage; ashy gray *not* encroaching upon sides of head as distinguished from *L. t. littoralis*.

Nesting.—Not known to breed in Washington. "Nest made of strips of bark and grass, built in a fissure of a rock at the side of a bunch of grass" (Reed). *Eggs*: 4 or 5, white. *Season*: June; one brood.

General Range.—Imperfectly made out—probably discontinuous. Reported breeding from such widely separated localities as the Rocky Mountains of British America and the Sierra Nevada and White Mountains of southern California; winters on the eastern slopes of the Rockies and irregularly eastward to western Nebraska, Manitoba, etc., westward to Cascade and Sierra Nevada ranges (Camp Harvey, Ore. Pullman, Wash. Chilliwhack, B. C.).

Range in Washington.—Probably of regular occurrence during migrations and in winter east of the Cascade Mountains only.

Authorities.—*Not previously reported*; W. T. Shaw in *epistola*, Dec. 31, 1908.

Specimens.—Pullman.

MOUNTAIN climbing as an art is still in its infancy in the Northwest and altho the Mountaineers and the Mazamas are attacking the situation vigorously we have yet much to learn of the wild life upon our Washington sierras. But what problem could be more fascinating to a lover of birds and mountains than that of working out accurately the distribution of the Rosy Finches in America? They are the mountaineers *par excellence*, they are the Jebusites of the untaken citadels, and our ignorance of their ways will ere long become a reproach to our vaunted western enterprise. As it stands,

however, only scanty crumbs of information have come to us concerning this most interesting and widely distributed race of Highlanders.

The Gray-crowned Leucosticte is considered the central figure of the genus, shading^a, as it does, into *L. atrata* of the Bitterroots and *L. australis* of Colorado, into *L. t. littoralis* of southern British Columbia, Washington and Oregon, and (perhaps *thru littoralis*) into *griseonucha* of the Aleutians. This assumes for the species a center of distribution in the Rocky Mountains of British Columbia, Alberta and Saskatchewan where the bird is known to occur. And so because of the greater severity of the winters in its normal haunts this form is found to be the greatest wanderer of its group, being frequently driven in the fall far out upon the central eastern plains or down the "inside passage" between the Rockies and Sierras.

It was in this fashion, probably, that a colony of this species became established in the southern Sierras of California, where it now maintains a vigorous existence separated, as we suppose, by at least a thousand miles from the parent stock in British Columbia.

No. 28.

HEPBURN'S LEUCOSTICTE.

A. O. U. No. 524a. *Leucosticte tephrocotis littoralis* (Baird).

Synonyms.—ROSY FINCH. HEPBURN'S ROSY FINCH. BAIRD'S ROSY FINCH.

Description.—*Adult male in summer:* Forehead and fore-crown black; occiput, broadly, and sides of head, clear ashy gray, color sometimes encroaching on chin and throat; nasal plumules grayish white; remaining plumage in general chestnut, chocolate, or rich vandyke brown, sharply contrasting with ashy gray on hind-neck and sides of head, inclining to blackish on throat, streaked with dusky on back and with more or less admixture of dusky on feather tips, especially on wings and flanks; feathers of upper and under tail-coverts, rump and flanks broadly and distinctly tipped with pink (of variable shade); wings and tail blackish; lesser and middle coverts broadly tipped with pink, the greater coverts, primary coverts and part of the flight feathers edged with pink or light carmine; rectrices with more or less edging of pinkish gray or light brown; bill black; feet and legs black. *Adult female:* of somewhat paler and duller coloration. *Adults in winter:* Feathers of back and scapulars edged with light brown; pink edgings of wings, etc., paler, and body plumage, especially on breast, with more or less pale skirting; bill yellow with dusky tip (this character is assumed as early as September). Length of adult male: 6.15 (156.2); wing 4.00 (101.6); tail 2.60 (66); bill .45 (11.4); tarsus .75 (19).

Recognition Marks.—Sparrow size; plumage warm brown with rosy skirtings; ashy gray on *sides* of head as distinguished from *L. tephrocotis*.

a. By "shading" here is not meant sub-specific relationship, altho this does obtain as regarding both *griseonucha* and *littoralis*, but rather suggestive relationship, assumed divergence from a common stock.

Nesting.—*Nest*: a thick mat of dried grasses placed in sheltered crevice of rock at great altitude. *Eggs*: Not yet taken but doubtless like those of *Leucosticte griseonucha*, viz., 4 or 5, pure white; av. size .97 x .67 (24.6 x 17). *Season*: June; one brood.

General Range.—Summer haunts include the higher mountain ranges of southeastern Alaska, British Columbia (west of the Rockies?) and Washington (possibly Oregon as well); "in winter south to Nevada, Utah, and Colorado, and east to eastern base of Rocky Mountains (casually to Minnesota), and along the Pacific coast to Kodiak, Sitka, Vancouver Island, etc." (Ridgway).

Range in Washington.—Breeds thruout the higher Cascades (Wright's Peak, Sahale, Mt. Baker, Mt. Rainier, etc.) and, probably, the Olympics. Retreats in winter to the lowlands, chiefly east of the Cascade Mountains.

Authorities.—? J. K. Lord, Nat. in V. Id. & B. C. 1866, p. 154. ["Hepburn's (sic) rosy finch," Johnson, Rep. Gov. W. T. 1884 (1885), 22.] Dawson, Auk, XIV. 1897, 92, 177. J. E.

Specimens.—P. Prov. E. C.

LIVES there a man so brutish that his heart does not kindle when he sees Rainier lit up with the ruddy glow of the evening sacrifice? If such there be, he is no bird-lover.

Lives there a woman who can
snobs of Kulshan.

Lives there a
man who can
snobs of Kulshan.



Mount Rainier, Wash.

Mount Rainier, Wash.

Mount Rainier, Wash.

purity thereon displayed? If so, she will not appreciate the Leucosticte. This bird is the vestal virgin of the snows, the attendant minister of Nature's loftiest altars, the guardian of the glacial sanctuaries.

One who loves the mountains cannot measure his praise nor bound his enthusiasm. Their sublimity bids him forget his limitations; and if one happens also to care for birds, it is matter of small justice to laud a bird whose devotion to the peaks appears as boundless as his own, besides knowing neither admixture of caution nor limitation of opportunity. Here is the patron saint of mountaineers! He alone of all creatures is at home on the heights, and he is not even dependent upon the scanty vegetation which follows the retreating snows, since he is able to wrest a living from the very glaciers. Abysses do not appall him, nor do the flower-strewn meadows of the lesser heights alienate his snow-centered affections.



Taken in Chelan County.

Photo by the Author

"THE CHILLY WILDERNESS OF SNOW-CLAD PEAKS."

Looking out on the chilly wilderness of snow-clad peaks which confronts Leucosticte on an early day in June, one wonders what the bird sees to justify the assumption of family cares. Save for a few dripping south exposures of inhospitable rock, there is nothing visible which affords promise of food unless it be the snow itself. And when one sees a little company of the

finches moving about demurely upon the face of a choppy snowdrift, pecking at the surface here and there, he begins to harbor an uncanny suspicion that the birds do eat snow. Closer examination, however, shows that the surface of all snow-banks, not freshly covered, is sprinkled with insects,—midges, beetles, wasps, and the like—insects which the spring gales have swept up to uncongenial heights and dropped, benumbed or dead with cold. These battered waifs the Leucostictes gather with untiring patience, and they are thus able to subsist as no other species can, up to the very summits.

The eggs of the Hepburn Leucosticte have not to our knowledge yet been taken. Mr. D. E. Brown, then of Glacier, found these birds scooping hollows under grass tussocks on the middle slopes of Baker, above timber line, on the 7th of June, 1905. On the 20th of July, 1900, Professor Lynds Jones and myself found a thick-walled grass nest settled upon bare rock without protection, on the south slope of the aiguille of Wright's Peak, at an elevation of some 9,000 feet, and within a hundred yards of the summit; this could hardly have belonged to any other species.

In July, 1907, knowing that it was too late for eggs, I yet spent several days searching the precipitous wall which separates the upper Horseshoe Basin from the glacier which heads Thunder Creek. Adult birds to the number of a dozen gleaned scraps from the dump of the Cascade Mine house; but, altho each made off in business-like fashion when "loaded," the stretch of the wall was too vast and its recesses too mazy to permit of exact work in tracing. I therefore examined carefully but with difficulty several of the weathered fissures, or *couloirs*, which ran perpendicularly up the face of the cliff. Here, under cover of rocks which had lodged in the throat of the fissure, or which had weathered out unevenly, old nests were found, simple affairs of coiled grasses, and too dilapidated for exact measurement. From one of these sites a pebble snapped from the finger must have fallen three hundred feet before striking the glacier below.

Now and then a passing bird, suspicious of my intent, stopped on some projecting point of rock, to utter the sole note which does duty for every mood, *churk* or *schthub*, a sound comparable only to the concussion of a small taut rope on a flag-pole. Finally, near the top of the Sahale Glacier, I got a line at two hundred yards on an occupied fissure, and traced both parent Leucostictes into its distant recesses. Climbing cautiously up a sharp slope of ice, my footsteps were guided by the almost incessant clamor of young birds. Arrived at the upper lip of the glacier, however, I found that it stood away from the rock-wall some fifteen feet, and that a chasm some forty feet in depth yawned beneath. Into this forbidding *bergschrund*, one of the fledgling Leucostictes had tumbled. He was not more than two-thirds grown (July 18th) and down feathers still fluttered from his cheeks, but he was a plucky little fellow, and had managed to scramble up off the ice onto a piece

of flat rock which caught a bit of the afternoon sun. Here, to judge from his lusty yelping, there could be no doubt that his parents would notice him, altho they would be powerless to secure his further release until his wings were grown. A Carnegie medal hovered suggestively over the spot, I know; but pray, consider,—the rock wall was perpendicular and smooth as glass, the ice-wall I stood on was undercut. No; even philornithy has its limits!



Taken in the Rainier National Park.

From a Photograph Copyright, 1908, by W. I.

A GLIMPSE OF MT. RAINIER FROM THE NISQUALLY GLACIER
A FAVORITE HAUNT OF THE HEPBURN LEUCOSTICTE

The nest containing the remaining youngsters was set well back in a rock fissure, concealed by projections eighty feet above the fallen first-born, and inaccessible to man from above or below. With the possible exception of the Black Cloud Swifts (*Cypseloides niger borealis*), who are reported to share at times these same cliffs, it is safe to say that the Leucostictes are the highest nesters on the continent.

No. 29.

REDPOLL.

A. O. U. No. 528. *Acanthis linaria* (Linn.).**Synonyms.**—COMMON REDPOLL. LESSER REDPOLL. LINNET. LINTIE.

Description.—*Adult male:* Crown crimson; breast and shoulders crimson in varying proportions according to season; frontlet, lores, and throat-patch sooty black; remaining lower parts white, flanks and crissum streaked with dusky; above, variegated dusky, flaxen-brown and whitish, the feathers having dusky centers and flaxen edgings; rump dusky and white in streaks, tinged with rosy; wings and tail dusky with flaxen or whitish edgings; two inconspicuous wing-bars formed by white tips of middle and greater coverts. *Female:* Similar but without red on rump and breast, the latter suffused with buffy instead; sides heavily streaked with dusky. *Immature:* Like female but without crimson crown. Length 5.50 (139.7) or less; wing 2.80 (71.1); tail 2.30 (58.4); bill .34 (8.6); depth at base .23 (5.8).

Recognition Marks.—Warbler to Sparrow size; crimson crown-patch in adults; no dusky spot on breast.

Nesting.—Does not breed in Washington. *Nest:* a bulky affair of twigs and grasses, lined with feathers and placed in trees and bushes. *Eggs:* 4-6, pale blue, dotted and speckled with reddish brown or umber. Av. size, .65 x .50 (16.5 x 12.7).

General Range.—Northern portions of northern hemisphere, south irregularly in winter, in North America to the Middle States, and southern Oregon.

Range in Washington.—Winter resident, abundant on East-side, infrequent or casual west of the Cascades.

Migrations.—Nov. 1-Dec. 15. Feb. 15-March 15. Yakima Co. Oct. 31, 1869. Chelan March 19, 1896.

Authorities.—*Tigiothus linaria* Cab. **Cooper and Suckley**, Rep. Pac. R. R. Surv. Vol. XII, pt. ii, 1860, 168. C&S. D^r. Ra. D^r. Kk. J. B.

Specimens.—(U. of W.) Prov. B. C. P.

THOSE who count themselves familiar with the Goldfinch are apt to let the first few flocks of Redpolls pass unquestioned. When, however, in late November, a norther brings down some thousands of these Alaskan waifs, the bird student is roused to attention. The resemblance between the two species is most striking in form and appearance as well as in habit and note. But once the eyes have been assured by a near revelation of convincing red, that *Acanthis linaria* is before them, the ears remark also a slight foreign accent in the *sweetie* call and in the rattling flight notes.

Redpolls summer abundantly along the coasts of Alaska, and along the higher levels down thru British Columbia. The winter movements of this species are irregular and somewhat confusing. According to Nelson, the

western residents retire into the interior of Alaska to winter, where they are able to withstand the fiercest cold. The interior birds retire largely to the south, and under the urgency of bad weather sweep into or thru eastern Washington in immense numbers. There is also a small movement setting in a southwesterly direction, so that some birds winter regularly on Vancouver Island, and a few straggle thru the Puget Sound country.

While with us, the Redpoll is nowise dependent upon the forests, but appears to seek the more open country by preference. It subsists chiefly upon seeds, gleaning them from the ground with much pleasant chatter, or seeking them in their winter receptacles. Redpoll again proves kinship with Goldfinch by eating thistle seeds, and with Siskin by his extravagant fondness for the alder catkin. Redpoll's manner is very confiding; and we are sure that he would not begrudge us a share of his winter viands, if we cared for them. The author is no vege-

tarian, but he is bound to admit that a "simple diet of grains, fruits and nuts" makes for contentment among the birds, even at forty below zero.

As spring comes on, and the gentle hyperboreans prepare to return to their native heather, we see the deep-dyed crimson of full regalia on crown and breast. But during the actual breeding season, we are told by a com-



REDPOLLS IN WINTER.

petent observer in Greenland, Holboell, the male not only becomes exceedingly shy but loses his rosy coloring. It is hardly to be supposed that this loss of color is a protective measure, but rather that it is the result of the exhaustive labors incident to the season. Nature, in that forbidding clime, cannot afford to dress a busy workman in fine clothes. It is noteworthy in this connection, also, that caged Redpolls lose their rosy tints never to regain them.

No. 30.

PINE SISKIN

A. O. U. No. 533. *Spinus pinus* (Wils.).

Synonyms.—AMERICAN SISKIN. PINE FINCH. PINE LINNET.

Description.—*Adult male and female:* Above brownish buffy; below creamy-buff and whitish; everywhere streaked with dusky or dark olive-brown; the streakings are finer on the head and foreparts, coarser on back and breast; wings fuscous, the flight feathers sulphur-yellow at the base, and the primaries edged with the same color; tail fuscous, all but the middle feathers sulphur-yellow at base. Bill comparatively slender, acute. Length 4.75-5.00 (12.6-12.7); wing 2.75 (6.9); tail 1.80 (4.5.7); bill .43 (10.9).

Recognition Marks.—Warbler size; conspicuous general streakiness, sulphur-yellow markings of wings and tail, most noticeable in flight.

Nesting.—*Nest:* saddled upon horizontal limb of evergreen tree, well concealed from below, usually at moderate heights; very variable in structure, flimsy to massive and ornate; composed of small twigs (usually fir), and tree-moss, with a lining of fine rootlets and horse- or cow-hair, rarely feathers. An average nest measures externally 4½ inches wide by 2¼ in. deep; internally 2 in. wide by 1 in. deep. *Eggs:* 1-4, usually 3 or 4, pale bluish green lightly dotted with rufous and blackish, chiefly about larger end. Av. size .67 x .48 (17 x 12.2). *Season:* March-September, but most abundant in April; one brood.

General Range.—North America at large, breeding in higher latitudes, and in coniferous forests of the West to southern boundary of United States; also sparingly in northeastern United States; irregularly south in winter to Gulf of Mexico.

Range in Washington.—In summer coextensive with evergreen timber, but especially common in mountains just below limit of trees; in winter more localized, or irregularly absent.

Authorities.—*Chrysomitris pinus* Bonap. **Baird**, Rep. Pac. R. R. Surv. IX, pt. II, 1858, p. 425. T. C&S. L.; Rh. D¹, D², Kk. J, B, E.

Specimens.—U. of W. Prov. B. E. P.

IN designing the Siskin, Nature achieved another triumph in obscurities. The heavy streaky pattern, worked out in dusky olive on a buffy brown



Taken at Longmire's Springs.

From a Photograph Copyright, 1908, by W. L. Dawson.

SIX LITTLE SISKINS.

"THE MOUNTAIN" AS A BACKGROUND

base, prepares the bird for self-effacement in any environment: while the sulphur-colored water-mark of the outspread wings barely redeems its owner from sheer oblivion. This remark applies, however, only to plumage. In behavior the Siskin is anything but a forgettable bird-person

Whatever be the time of year, Siskins roam about in happy, rollicking bands, comprising from a score to several hundred individuals. They move with energy in the communal flight, while their incessant change of relative positions in flock suggests those intramolecular vibrations of matter, which

the "two, phewers" are telling us about. When a bird is sighted alone, one sees that it is the graceful, undulating, or "loping," flight of some Goldfinch although the usual Siskin indulges so regularly.

Many of the notes are unusual as of the Goldfinch. There are first those little shortening notes called *cooing* and *peepers*, when the birds are not too busy feeding. The *cooing* of many is *cooing* to the sun — but there is another note quite distinctive. It is a *hissed*, but regularly pulsating production with a peculiar vocal sound (like a German *schlamm* it), *juu* or *juu-juu*. Sometimes effect does the intensity of this note that the bird,



THE HEAVENS OF PARADISE.
SISKIYOU, 1934, 1935, 1936.

Photo by W. L. L. L. L. L.

that it always indicates a display of the hidden vibrant markings of wings and tail.

When first by passion the Siskin is agitated, also, it *extends* song. This *harmonic* *harmonic* is *transient*, but not *lost* except in occasional passages — out of *chattering*, *constant*, *variable* in *diverse* elements. The bird has, besides its own peculiar notes, many *Scotch-like* phrases and interjections, resembling some of the Goldfinch, and some of the California Purple Finch. The most striking phrase produced in this connection is a *triple* *chirp* of the Evening Grosbeak, *admitted* of course, but very effective.

This perhaps not *unusually* usual to the Western Golden-crowned Kinglet, and to the Western Wren. When there is not another bird in Washington which enters a more nearly *unusual* distribution than the Two

Siskin. Its breeding range coincides with the distribution of evergreen timber; its feeding forays include all alder trees; and roving bands are likely to turn up anywhere in eastern Washington, if there is shrubbery larger or greener than sage-brush at hand.

Much of Siskin's food is obtained upon the ground. City lawns are favorite places of resort; these birds, together with California Purple Finches, appearing to derive more benefit from grass plots, whether as granaries or insectaria, than does any other species. They share also with Crossbills a strong interest in the products of fir trees, whether in cone or leaf. Their peculiar province, however, is the alder catkin, and the tiny white seeds obtained from this source are the staple supply of winter. Mr. Brown, of Glacier, has examined specimens in which the crops were distended by these seeds exclusively. While the observer is ogling, it may be an over-modest Townsend Sparrow, a flock of Pine Siskins will charge incontinently into the alders above his very head. With many *zees* and *zeems* they fall to work upon the stubborn catkins, poking, twisting, prying, standing on their heads if need be, to dig out the dainty dole. Now and then, without any apparent reason, one detachment will suddenly desert its claim and settle upon another, precisely similar, a few feet away; while its place will be taken, as likely as not, by a new band, charging the tree like a volley of spent shot.

Nesting time with the Siskin extends from March to September, and the parental instinct appears in the light of an individual seizure, or decimating epidemic, rather than as an orderly taking up of life's duties. Smitten couples drop out from time to time from the communal groups, and set up temporary establishments of their own; but there is never any let-up in the social whirl on the part of those who are left; and a roistering company of care-free maids and bachelors *en fete* may storm the very tree in which the first lullabies are being crooned by a hapless sister. Once in a while congenial groups agree to retire together, and a single tree or a clump of neighbors may boast a half-a-dozen nests; tho which is which and what is whose one cannot always tell, for the same intimacy which suggested simultaneous marriage, allows an almost unseemly interest in the private affairs of a neighbor.

Once embarked upon the sea of matrimony, the female is a very determined sitter, and the male is not inattentive. In examining the nest of a sitting bird one may expect the mother to cover her eggs at a foot's remove, without so much as *by-your-leave*.

The nest, in our experience, is invariably built in an evergreen tree, usually a Douglas spruce (*Pseudotsuga mucronata*), and is commonly saddled upon a horizontal or slightly ascending limb at some distance from the tree trunk. Viewed from below, it appears merely as an accumulation of material at the base of divergent twigs, where moss and waste is wont to gather.

to distance from the ground, it may vary from four to a hundred feet. The latter is the limit of investigation, but there is no particular reason to suppose they do not go higher. Most of the nests are placed at from eight to twenty feet up.

The materials used in construction are dead fir-twigs, weed-stalks, strips of cedar-bark, mosses of several sorts, grass, fir, hair, plant down, etc. The interior may be carefully lined with fine rootlets, fur, horse-hair, feathers, etc. There is great variation both in material and workmanship. Some nests appear little better than those of Chipping Sparrows; while the best cannot certainly be distinguished (without the eggs) from the elegant crea-



Young of the Year.

Parent and young.

Young of the Year in the nest.

hatched green, scaled, with olive blotches, streaks, and occasional markings of red and brown, (hatched about the 1st of June). These are considerably larger and darker than those of the Chipping Sparrow. Measurements of average eggs are: length .78 inch.

Incubation lasts about twelve days; and the young are ready to fly in many more. The brood does not remain long in a family group but joins the young clan as soon as possible. We suspect, therefore, that the Siskin raises but one brood in a season; and she undoubtedly heaves a sigh of relief when she may again don her evening gown, and rejoin "society."

tions of the Audubon Society. One nest found in the mountains of North Carolina, was supposed to possess two nests in the same place. Another nest found in the mountains of North Carolina, was supposed to possess two nests in the same place. Another nest found in the mountains of North Carolina, was supposed to possess two nests in the same place.

The eggs are three or four in number; the sets of one and two are not rare in some sections.

There are a few pale bluish green scaled, with olive blotches, streaks, and occasional markings of red and brown, (hatched about the 1st of June). These are considerably larger and darker than those of the Chipping Sparrow. Measurements of average eggs are: length .78 inch.

No. 31.

WESTERN GOLDFINCH.

A. O. U. No. 529a. *Astragalinus tristis pallidus* (Mearns).**Synonyms.**—PALE GOLDFINCH. "WILD CANARY." "SUMMER YELLOW-BIRD." THISTLE-BIRD.**Description.**—*Adult male in summer:* General plumage clear lemon or canary yellow; crown patch, including forehead and lores, black; wings black, varied by white of middle and lesser coverts, tips of greater coverts and edges of secondaries; tail black, each feather with white spot on inner web; tail coverts broadly tipped with white; bill-orange, tipped with black; feet and legs light brown; irides brown. *Adult female in summer:* Above grayish brown or olivaceous; wings and tail dusky rather than black, with white markings rather broader than in male; below whitish with buffy or yellow suffusion brightest on throat and sides. *Adult male in winter:* Like adult female but brighter by virtue of contrasting black of wing and tail; white markings more extended than in summer. *Female in winter:* not so yellow as in summer, grayer and browner with more extensive white. *Young:* Like winter adults but browner, no clear white anywhere, cinnamonous instead. Length of adult male: (skins) 4.71 (120); wing 2.95 (75); tail 1.97 (50); bill .41 (10.4); tarsus .55 (14.1).**Recognition Marks.**—Warbler size; black and yellow contrasting, with conical bill, distinctive; undulating flight; canary-like notes. Feeds on thistle seed as does also *Spinus pinus*, a closely related but much less handsome species.**Nesting.**—*Nest:* A beautiful compact structure of vegetable fibers, "hemp," grasses, etc., lined with vegetable cotton or thistle-down, and placed at varying heights in trees or bushes, usually in upright crotches. *Eggs:* 3-6, pale bluish white, unspotted. Av. size, .65 x .52 (16.5 x 13.2). *Season:* July and August; one brood.**General Range.**—Western United States, except the Pacific coast district, north to British Columbia and Manitoba, south to northern and eastern Mexico.**Range in Washington.**—East-side, not common resident in half-open situations and along streams; resident but roving in winter.**Authorities.**—*Chrysomitris tristis*, Brewster, B. N. O. C. VII. Oct. 1882, p. 227. (T., D., D., Ss., Ss., J.)**Specimens.**—P. Prov. C.

"HANDSOME is that handsome does," we are told, but the Goldfinch fulfils both conditions in the proper sense, and does not require the doubtful apology of the proverb, which was evidently devised for plain folk. One is at a loss to decide whether Nature awarded the Goldfinch his suit of fine clothes in recognition of his dauntless cheer or whether he is only happy because of his panoply of jet and gold. At any rate he is the bird of sunshine the year around, happy, careless, free. Rollicking companies of them rove the country-side, now searching the heads of the last year's mullein

stalks and enlivening their quest with much pleasant chatter, now scattering in obedience to some whimsical command and sowing the air with their laughter. *Perchie'-opee* or *perchie'-ichie'-opee*, says every bird as it glides down each successive billow of its undulating flight. So enamored are the Goldfinches of their gypsy life that it is only when the summer begins to wane that they are willing to make particular choice of mates and nesting spots. As late as the middle of July one may see roving bands of forty or fifty individuals, but by the first of August they are usually settled to the task of rearing young. The nesting also appears to be dependent in some measure upon the thistle crop. When the weeds are common and the season forward, nesting may commence in June; but so long as thistle down is scarce or wanting, the birds seem loath to begin.

Nests are placed in the upright forks of various kinds of saplings, or even of growing plants, in which latter case the thistle, again, proves first choice. The materials used are the choicest obtainable. Normally the inner bark of hemp is employed for warp, and thistle-down for woof and lining, so that the whole structure bleaches to a characteristic silver-gray. In the absence or scarcity of these, grasses, weeds, bits of leaves, etc., are bound together with cobwebs, and the whole felted with other soft plant-downs, or even horse-hair. The whole is made fast thruout its depth to the supporting branches, and forms one of the most durable of summer's trophies.

From four to six, but commonly five, eggs are laid, and these of a delicate greenish blue. Fourteen days are required for hatching; and from the time of leaving the nest the youngsters drone *babee! babee!* with weary iteration, all thru the stifling summer day.

During the nesting season the birds subsist largely upon insects of various kinds, especially plant-lice, flies, and the smaller grasshoppers; but at other times they feed almost exclusively upon seeds. They are very fond of sunflower seeds, returning to a favorite head day after day until the crop is harvested. Seeds of the lettuce, turnips, and other garden plants are levied upon freely where occasion offers; but thistle seed is a staple article, and that is varied by a hundred seeds besides, which none could grudge them.

Thruout the winter the Western Goldfinches are much less in evidence, the majority of them having retired to the southland at that season. Those which remain are somewhat altered to appearance: the wings and tail show much pure white, and the yellow proper is now confined to the throat and the sides of the head and neck. He is thus a lighter and a brighter bird than his eastern brother. But the western bird has the same merry notes and sprightly ways which have made the name of Goldfinch synonymous with sunshine.

No. 32.

WILLOW GOLDFINCH.

A. O. U. No. 529b. *Astragalinus tristis salicamans* (Grinnell).

Synonyms.—CALIFORNIA GOLDFINCH. "YELLOW-BIRD," etc.

Description.—Similar to *A. t. pallidus*, but wings and tail shorter and coloration very much darker; adult male in summer plumage has tinge of pale olive-green on back, while winter adults and young are decidedly darker and browner than corresponding plumage of *A. t. pallidus*. Wing (of adult male) 2.75 (70); tail 1.73 (44).

Recognition Marks.—As in preceding but decidedly darker and browner, especially in winter.

Nesting.—As in *A. t. pallidus*.

General Range.—Pacific coast district from Lower California (Cerro Id.) north to British Columbia. Has been taken at Okanagan Landing, B. C. (Brooks).

Range in Washington.—Not common resident on West-side only, chiefly in cultivated valleys.

Authorities.—*Chrysomitris tristis* Bon. **Baird**, Rep. Pac. R. R. Surv. IX. 1858, 421, 422, part. C&S. L². Kb. Ra. Kk. B. E.

Specimens.—(U. of W.) Prov. B. E.

GOLDFINCHES are a bit of a rarity on Puget Sound. Of course we see them every season, and one may see a great deal of a particular troop, once its general range is ascertained; but, taken all in all, the bird is not common. Neither Cooper nor Suckley saw this Goldfinch, altho particularly wondering at its absence. The clearing of the forests and the cultivation of the soil is conducive to its increase, however; and there is every reason to believe that we are seeing more of it year by year.

There has been a warm discussion as to the subspecific validity of the Willow Goldfinch, but those who see birds of this form in late winter or early spring cannot but be impressed with the striking brownness of its plumage, as well as by the more extensive white upon the wings, as compared with the eastern bird. Beyond its partiality for willow trees, it has no further distinguishing traits, unless, perhaps, it may be reckoned less tuneful, or noisy.

No. 33.

CASSIN'S PURPLE FINCH.

A. O. U. No. 518. *Carpodacus cassinii* Baird.

Synonym.—CASSIN'S FINCH.

Description.—*Adult male*: Crown dull crimson; back and scapulars vinaceous mixed with brownish and sharply streaked with dusky; wings and tail dusky with more or less edging of vinaceous; remaining plumage chiefly dull rosy, passing into white on belly and crissum; under tail-coverts white streaked with dusky. *Adult female*: Everywhere (save on wings, tail and lower abdomen) sharply streaked with dusky, clearly, on a white ground, below; above on an olive-gray or olive-buff ground. *Immature male*: Like female in plumage and indistinguishable. Length of adult 6.50-7.00 (105.1-177.8); wing 3.62 (92); tail 2.56 (65); bill .50 (12.6); tarsus .73 (18.5).

Recognition Marks.—Sparrow size; red of crown *contrasting* with back distinctive as compared with *C. p. californicus*; general streakiness of female (and male in more common plumage).

Nesting.—*Nest*: of twigs and rootlets lined with horse-hair, string, etc., placed in pine or fir tree well out from trunk. *Eggs*: 4 or 5, colored as in succeeding species; a little larger. Av. size .85 x .60 (21.6 x 15.2). *Season*: June; one or two broods according to altitude.

General Range.—Western United States from the eastern base of the Rocky Mountains west to (but not including?) the Pacific coast district; north to British Columbia; south over plateau region of Mexico; found chiefly in the mountains.

Range in Washington.—At least coextensive with pine timber in eastern Washington; found to summit of Cascades but westerly range imperfectly made out.

Authorities.—["Cassin's Purple Finch," Johnson, Rep. Gov. W. T. 1883 (1885), 22.] *Carpodacus cassinii*, Dawson, Auk, Vol. XIV, 1897, p. 177. D. J.

Specimens.—Prov. C.

CASSIN'S FINCH is the bird of the eastern Cascades and the timbered foothills of northern Washington. While ranging higher than other finches, it shares with them an inclination to urban life, and a full realization of the advantages of gardens and cultivated patches. At Stehekin I saw a flock of them gleaning crumbs as complacently as sparrows, in the yard at the rear of the hotel. At Chelan they haunt the lonesome pine trees which still dot the shores of the lake, seemingly regarding their gnarled recesses as citadels where alone they may be safe from the terrors of the open country.

As the bird-man lay sprawling in the grateful shadow of one of these grim sentinels, munching a noonday lunch, and remonstrating with Providence at the unguarded virtues of the all-crawling ant, he spied a last year's Oriole's nest hanging just over his head, while an accommodating Cassin Finch

called his attention to *this* year's nest in process of construction, by going over and helping herself to a beakful of material, which she pulled out of the structure by main force. She evened things up, however, (for the bird-man) by immediately visiting her own nest, pitched on the upper side of a horizontal branch near the end.

This female Cassin was a wearisome bird, for she sat and twittered inanely, or coaxed, every minute her husband was in the tree. He, poor soul, was visibly annoyed at her indolence, not to say her wantonness, and had as little to do with her as possible. However, he was a young fellow, without a bit of red on him, and he should not have been over-critical of his first mate in honeymoon.

On the pine-clad slopes of Cannon Hill in Spokane, there is no more familiar sound in June than the wanton note of the female Cassin Finch, *oreé-ch, oreé-ch*, delivered as often as not with quivering wings, and unmistakably inviting the attentions of the male. Perhaps it is fair to call this a love note, but it is delivered with the simpering insistence of a spoiled child.

The sight of a singing male in high plumage is memorable. He selects a position at the tip of a pine branch, or perhaps on a bunch of cones at



CASSIN'S FINCH.

the very top of the tree, and throws himself into the work. His color, crimson, not purple, is pure and clear upon the crown only; elsewhere, upon nape, shoulders, and breast, it presents merely a suffusion of red. A song heard near Chelan was much like that of a California Purple Finch in character, but less musical and more chattering, with the exception of one strong note thrown in near the close. This note was very like the characteristic squeal of the Evening Grosbeak, *gimp*, or *thkimp*, out of all keeping with the remainder—unquestionably borrowed.

The Cassin Finch is quite as successful as a mimic as his cousin from

California. Besides his own wild, exultant notes, he rapidly strings together those of other birds, and renders the whole with the spontaneity and something of the accent of the Lark Sparrow. Indeed, when I first heard one sing on a crisp May morning on the banks of the Columbia, I thought I was hearing a rare burst of the latter bird, so much of its song had been appropriated by the Finch. Besides this, strains of Western Vesper Sparrow, Mountain Bluebird, and Louisiana Tanager were recognized.

CALIFORNIA PURPLE FINCH.

No. 34.

A. O. U. No. 517a. *Carpodacus purpureus californicus* Baird.

Description.—*Adult male*: General body plumage rich crimson or rosy red, clearest on crown and upper tail-coverts, more or less mingled with dusky on back and scapulars, passing into white on crissum and under tail-coverts; wings and tail brownish dusky with reddish edgings. Bill and feet brownish. *Adult female*: Above olive dusky in streaks, with edging or gloss of brighter olivaceous; underparts whitish, everywhere, save on middle abdomen, crissum and under tail-coverts, streaked with olive dusky, finely on throat, broadly on breast and sides, shading into pattern of upperparts on sides of head, neck and chest. *Immature male, and male in ordinary (?) plumage*: exactly like female in coloration. Length about 5.75 (146); wing 3.07 (78); tail 2.28 (58); bill .45 (11.5); tarsus .70 (17.5).

Recognition Marks.—"Warbler size" but sturdier, an unmistakable sparrow; rosy coloration of male distinctive (without crossed mandibles) but *streaky* pattern oftenest seen. Distinguishable from the Pine Siskin (*Spinus pinus*) by larger size, more sedate ways and absence of sulphury wing- and tail-markings.

Nesting.—*Nest*: well built, of fir twigs, heavily lined with green moss, horse-hair, string, etc.; placed in tree (deciduous or evergreen) at elevation of 5-40 feet and usually at some distance from trunk; measures outside 5 in. wide by 3 in. deep, inside 2½ in. wide by 1½ in. deep. *Eggs*: 4 or 5, light greenish blue, spotted and streaked with violaceous and black, chiefly about the larger end. Round ovate to elongate ovate; varying in dimensions from .75 x .56 (10 x 14.2) to .91 x .59 (22.8 x 15). *Season*: first week in May and first week in June; two broods.

General Range.—Pacific coast district from southern California north to British Columbia (including Vancouver Island). More or less resident thruout range but drifts (casually?) to southeastward in Arizona during migrations.

Range in Washington.—West-side, chiefly at lower levels; especially partial to orchards and cultivated sections. Irregularly resident but numbers augmented in spring.

Authorities.—*Carpodacus californicus* Baird, **Baird**, Rep. Pac. R. R. Surv. IX. 1858, 414. T. C&S. L. Rh. Kb. Ra. Kk. B. E.

Specimens.—U. of W. Prov. P. B. BN. E.

OF the streaked, streaky is this demure and inoffensive bird in the olivaceous plumage, in which we usually see him, and always see *her*. But the sharpness and magnitude of the dusky streaks above and below confer a measure of distinction, even when there is no trace of the adult crimsons, miscalled purple. This finch is a familiar object about the gardens, orchards, and parks in Western Washington. It moves about for the most part silently, inspecting birds and flowers, sampling fruit, or gleaning seeds from the ground in company with its own kind, or with the humbler and equally streaked Siskins. While not altogether dependent upon human bounty, it probably owes more to man than does any other native species.

Wright's Park, in Tacoma, appears to lead the state by two weeks in the early budding of its flowering plants, and here Purple Finches appear to the best advantage. In the luxuriant bushes of the red flowering currant (*Ribes sanguineum*) one may see them feeding during the last week of March. The Finches pluck the flowers assiduously, and either eat the fleshy part at the base, the tender ovary, or else press out the nectar just above, or both. A flower is first plucked off whole and held in the bill, while the bird appears to *smack its lips* several times; then the crimson corolla is allowed to drop upon the ground, which thus becomes carpeted with rejected beauty. Like many related species, the California Finch is rather unwary, so that one may study his behavior at close range.

Because the Purple Finch is usually so unobtrusive, we are startled at the first outburst of spring song. Nothing more spontaneous could be desired, and the mellow, musical yodelling of this bird is one of the choicest things allowed us on the West-side. The song is midway between a trill and a carol, and has a wild quality which makes it very attractive. The notes are so limpid and penetrating that one is sometimes deceived as to the distance of the singer, supposing him to be in a neighboring copse when, in truth, he occupies a distant fir-top. *Chcedoorcédoorecé doorecé doorecé doorecé doorecé doorecé drectorecé* may afford an idea of the rolling, rollicking character of the song, but is, of course, absurdly inadequate.

A master singer among the Purple Finches once entertained us from the top of a fir tree a hundred feet high. He was in the dull plumage, that is, without red; and altho he sang briskly at intervals we were not prepared for any unusual exhibition of vocal powers on his part. It was a long time, therefore, before we put the cry of a distant Steller Jay up to him. Our suspicions once aroused, however, we caught not only the Steller Jay cry, unmistakably, but also half a dozen others in swift and dainty succession, after the usual Purple Finch prelude. I clearly recognized notes of the Flicker, Steller Jay, *Canary*, American Crossbill, and Seattle Wren. These imitative efforts varied in correctness of execution, and came to us with the

distance of the original singer plus that of the Finch, so that the result was not a little confusing, tho very delightful when explained.

During courtship this Finch will execute an aerial song-dance, consisting of sundry jerks and crazy antics, interspersed with a medley of ecstatic notes; at the conclusion of which he will make a suggestive dive at his fiancée, who meanwhile has been poking fun at him.

For some reason nests have been exceedingly hard to find. Many birds are always pottering about with no apparent concern for nesting time, and Mr. Bowles hazards that they do not mate until the third year. Apropos of this, one remarks the scarcity of highly plumaged males at all seasons. I have gone six months at a time, where Finches were not uncommon, without seeing a single *red* bird. In fact, I never found the latter common except in the vicinity of Tacoma.

Nests are placed, preferably, near water, in evergreen or deciduous trees, and at heights varying from six to forty feet. They usually occur on a bough at some distance from the trunk of a supporting tree, seldom or never being found in a crotch. Composed externally of fir twigs, they are lined copiously with green moss, horse-hair, and string, and contain four or five handsome blue-green eggs, spotted and dashed with violet and black.

Two broods are probably brought off in a season, the first about the 20th of May and the second a month later. A sitting female outdoes a Siskin in her devotion to duty, and not infrequently requires to be lifted from her eggs. The male trusts everything to his wife upon these occasions, but is on hand to do his share of the work when it comes to feeding the babies.

No. 35.

ENGLISH SPARROW.

INTRODUCED. *Passer domesticus* (Linn.).

Synonyms.—HOUSE SPARROW. DOMESTIC SPARROW. HOODLUM.

Description.—*Adult male*: Above ashy gray; middle of back and scapulars heavily streaked with black and bay; tail dusky; a chestnut patch behind eye spreading on shoulders; lesser wing-coverts chestnut; middle coverts bordered with white, forming a conspicuous white bar during flight, remainder of wing dusky with bay edging; below ashy gray or dirty white; a black throat-patch continuous with lores and fore-breast; bill and feet horn color. *Adult female*: Brownish rather than gray above; bay edging lighter; no chestnut, unmarked below. Length 5.50-6.25 (130.7-158.8); wing 3.00 (76.2); tail 2.20 (55.9); bill .50 (12.7). Sexes of about equal size.

Recognition Marks.—"Sparrow size," black throat and breast of male; female obscure brownish and gray.

Nesting.—*Nest*: a globular mass of grass, weeds and trash, heavily lined with feathers; placed in tree and with entrance in side; or else heavily lined

cavity anywhere. Holes in trees and electric lamps are alike favored. *Eggs*: 4-7, whitish, heavily dotted and speckled with olive-brown or dull black. The markings often gather about the larger end; sometimes they entirely obscure the ground color. Av. size, .86 x .62 (21.8 x 15.8). *Season*: March-September; several broods.

General Range.—"Nearly the whole of Europe, but replaced in Italy by *P. italic*, extending eastward to Persia and Central Asia, India, and Ceylon" (Sharpe). "Introduced and naturalized in America, Australia, New Zealand, etc." (Chapman).

Range in Washington.—As yet chiefly confined to larger cities and railroad towns, but spreading locally in farming sections.

Authorities.—Rathbun, Auk, Vol. XIX. Apr. 1902, p. 140. Ra. Kk. B. E.

Specimens.—B. C.

WHAT a piece of mischief is the Sparrow! how depraved in instinct! in presence how unwelcome! in habit how unclean! in voice how repulsive! in combat how moblike and despicable! in courtship how wanton and contemptible! in increase how limitless and menacing! the pest of the farmer! the plague of the city! the bane of the bird-world! the despair of the philanthropist! the thrifty and insolent beneficiary of misguided sentiment! the lawless and defiant object of impotent hostility too late aroused! Out upon thee, thou shapeless, senseless, heartless, misbegotten tyrant! thou tedious and infinite alien! thou myriad cuckoo, who dost by thy consuming presence bereave us daily of a million dearer children! Out upon thee, and woe the day!

Without question the most deplorable event in the history of American ornithology was the introduction of the English Sparrow. The extinction of the Great Auk, the passing of the Wild Pigeon and the Turkey,—sad as these are, they are trifles compared to the wholesale reduction of our smaller birds, which is due to the invasion of this wretched foreigner. To be sure he was invited to come, but the offense is all the more rank because it was partly human. His introduction was effected in part by people who ought to have known better, and would, doubtless, if the science of ornithology had reached its present status as long ago as the early Fifties. The maintenance and prodigious increase of the pest is still due in a measure to the imbecile sentimentality of people who build bird-houses and throw out crumbs for "the dear little birdies," and then care nothing whether honest birds or scallawags get them. Such people belong to the same class as those who drop kittens on their neighbors' door-steps because they wouldn't have the heart to kill them themselves, you know.

The increase of this bird in the United States is, to a lover of birds,

simply frightful. Their fecundity is amazing and their adaptability apparently limitless. Mr. Barrows, in a special report prepared under the direction of the Government, estimates that the increase of a single pair, if unhindered, would amount in ten years to 275,716,083,698 birds.

As to its range, we note that the subjugation of the East has long been accomplished, and that the conquest of the West is succeeding rapidly. It is not possible to tell precisely when the first Sparrows arrived in Washington, but it is probable that they appeared in Spokane about 1895. Of its occurrence in Seattle, Mr. Rathbun says: "Prior to the spring of 1897 I had never seen this species in Seattle, but in June of that year I noted a pair. The following season I saw fourteen; in 1899 this number had increased to about seventy, associating in small flocks."

The favorite means of dissemination has been the box car, and especially the grain car. The Sparrows, being essentially grain and seed eaters, frequent the grain cars as they stand in the railroad yards, and are occasionally imprisoned in them, hopeful stowaways and "gentlemen of fortune." On this account, also, the larger cities and railroad towns are first colonized, and at this time of writing (Jan., 1908) the birds are practically confined to them, Tacoma having an especial notoriety in this respect because of its immense grain-shipping interests.

Difficult as it may seem, it is true that the English Sparrow adopts the policy of Uriah Heep upon first entering a town. With all the unctuous humility of a band of Mormon apostles, the newcomers talk softly, walk circumspectly, and either seek to escape notice altogether, or else assiduously cultivate the good opinion of their destined dupes. Thus, I resided in the town of Blaine for two months (in 1904) without running across a single member of the pioneer band of nine English Sparrows, altho I was assured on good authority that the birds had been there for at least two years previous.

It requires no testimony to show that the presence of this bird is absolutely undesirable. It is a scourge to the agriculturist, a plague to the architect, and the avowed and determined enemy of all other birds. Its nests are not only unsightly but unsanitary, and the maudlin racket of their owners unendurable. The bird is, in short, in the words of the late Dr. Coues, "a nuisance without a redeeming quality." Altho we assent to this most heartily, we are obliged to confess on the part of our race to a certain amount of sneaking admiration for the Sparrow. And why, forsooth? Because he fights! We are forced to admire, at times, his bull-dog courage and tenacity of purpose, as we do the cunning of the weasel and the nimbleness of the flea. He is vermin and must be treated as such; but, give the Devil his due, of course. What are we going to do about it? Wage unceasing warfare, as we do against rats. There will possibly be rats as long as there are men,

but a bubonic plague scare operates very effectually to reduce their numbers. No doubt there will be English Sparrows in cities as long as there are brick-bats, but a clear recognition of their detestable qualities should lead every sensible person to deny them victuals and shelter. The House Sparrow is no longer exterminable, but he may be, *must be* kept within bounds.

No. 36.

SNOWFLAKE.

A. O. U. No. 534. **Plectrophenax nivalis** (Linn.)

Synonym.—SNOW BUNTING.

Description.—*Adult male in summer:* Pure white save for bill, feet, middle of back, scapulars, bastard wing, the end half of primaries and inner secondaries, and the middle tail-feathers, which are black. *Female in summer:* Similar, but upperparts streaked all over with black, and the black wings largely replaced by fuscous. *Adults in winter:* Entire upperparts overcast with browns—rusty or seal brown—clear on crown, grayish and mottled with dusky centers of feathers on back, scapulars, etc.; also rusty ear-patches, and a rusty collar, with faint rusty wash on sides. The black of wing and tail-feathers is less pure (fuscous in the female) and edged with white or tawny. Length 6.50-7.00 (165.1-177.8); wing 4.12 (104.6); tail 2.54 (64.5); bill .40 (10.2).

Recognition Marks.—Sparrow size; conspicuously and uniquely white, with blacks and browns above.

Nesting.—Does not breed in Washington. "*Nest:* on the ground in the sphagnum and tussocks of Arctic regions, of a great quantity of grass and moss, lined profusely with feathers. *Eggs:* 4-6, very variable in size and color, about .50 x .65 (22.9 x 16.5), white or whitish, speckled, veined, blotched, and marbled with deep browns and neutral tints" (Coues.).

General Range.—"Northern parts of the northern hemisphere, breeding in the Arctic regions; in North America south in winter into the northern United States, irregularly to Georgia, southern Illinois, Kansas and Oregon."

Range in Washington.—East-side, of regular occurrence in open country; casual west of the Cascades.

Migrations.—Nov. 4, 1899 (Yakima County). March 17, 1896 (Okanogan County).

Authorities.—["Snow Bunting," Johnson, Rep. Gov. W. T. 1884 (1885), 22.] **Dawson**, Auk, XIV. 1897, 178. T. D¹. D². B. E.

Specimens.—(U. of W.) Prov. B. E. P.

I WELL remember my first meeting with this prince of storm waifs, the Snowflake. It was in Chelan County on a chilly day in December. A distant-faring, feathered stranger had tempted me across a bleak pasture, when all at once a fluttering snowdrift, contrary to Nature's wont, rose from

earth toward heaven. I held my breath and listened to the mild babel of *tut-tut-tut-tut*, with which the Snow Buntings greeted me. The birds were loath to leave the place, and hovered indecisively while the bird-man devoured them with his eyes. As they moved off slowly, each bird seemed alternately to fall and struggle upward thru an arc of five or six feet, independently of his fellows, so that the flock as a whole produced quite the effect of a troubled snowstorm.

Snowflakes flock indifferently in winter and may occur in numbers up to several hundred. At other times a single, thrilling, vibrant call-note, *tee* or *te-ee*, may be heard during the falling of the real flakes, while the wandering mystery passes overhead, unseen. Stray birds not infrequently mingle with flocking Horned Larks; while Snowflakes and Lapland Longspurs are fast friends in the regions where the latter are common.

Probably these birds are of regular tho sparing occurrence in the Big Bend and Palouse countries, but they do not often reach the southern border of the State; and their appearance on Puget Sound, as upon the prairies of Pierce County, is quite unusual. While with us they move aimlessly from field to field in open situations, or glean the weed-seed, which forms their almost exclusive diet. In time of storm, or when emboldened by the continuance of winter, they may make their appearance in the barnyard, or about the outbuildings, where their sprightly notes and innocent airs are sure to make them welcome.

It is difficult to conceive how these birds may withstand the frightful temperatures to which they are subjected in a winter upon the Saskatchewan plains, and yet they endure this by preference to the effeminizing influences which are believed to prevail south of "Forty-nine," and especially west of the Rockies. Close-knit feathers, the warmest covering known, fortified by layers of fat, render them quite impervious to cold; and as for the raging blizzard, the birds have only to sit quietly under the snow and wait till the blast has blown itself out.

The sun alone prevails, as in the case of the man with the cloak, and at the first hint of the sun's return to power, these ice-children hasten back to find their chilly cradles. A few nest upon the Aleutian Islands, and along the shores of northern Alaska; but more of them resort to those ice-wrapped islands of the far North, which are mere names to the geographer and dismal memories to a few hardy whalers. Peary's men found them breeding in Melville Land; and if there is a North Pole, be assured that some Snowflake is nestling contentedly at the base of it.

No. 37.

ALASKAN LONGSPUR.

A. O. U. 536a. *Calcarius lapponicus alascensis* Ridgw.

Description.—*Adult male in summer:* Head, throat, and fore-breast black; a buffy line behind eye and sometimes over eye; a broad nuchal patch, or collar, of chestnut-rufous; remaining upperparts light grayish brown, streaked with black and with some whitish edging; below white; heavily streaked with black on sides and flanks; tail fuscous with oblique white patches on the outer rectrices; feet and legs black; bill yellow with black tip. *Adult male in winter:* Lighter above; the black of head and chestnut of cervical collar partially overlaid with buffy or whitish edging; the black of throat and breast more or less obscured by whitish edging. *Adult female in summer:* Similar to male in summer, but no continuous black or chestnut anywhere; the black of head mostly confined to centers of feathers,—these edged with buffy; the chestnut of cervical collar only faintly indicated as edging of feathers with sharply outlined dusky centers; black of throat and chest pretty thoroly obscured by grayish edging, but the general pattern retained; sides and flanks with a few sharp dusky streaks. *Adult female in winter:* [Description of October specimen taken in Seattle] Above buffy grayish brown streaked (centrally upon feathers) with black, wing coverts and tertials with rusty areas between the black and the buffy, and tipped with white; underparts warm buffy brownish, lightening on lower breast, abdomen, and under tail-coverts (where immaculate), lightly streaked with black on throat, chest, and sides, sharply on sides and flanks. Length of adult males about 6.50; wing 3.77 (95.8); tail 2.50 (63.3); bill .46 (11.7); tarsus .86 (21.8). Female smaller.

Recognition Marks.—Sparrow size; terrestrial habits; black head and breast of male. The bird may be distinguished from the Horned Lark, with which it sometimes associates, by the greater extent of its black areas, and by the chirruping or rattling cry which it makes when rising from the ground.

Nesting.—Does not breed in Washington. *Nest:* in grass tussock on ground, flimsy or bulky, of grasses and moss, frequently water-soaked, and lined carefully with fine coiled grass, and occasionally feathers. *Eggs:* 4-6, light clay-color with a pale greenish tinge, variously marked,—speckled, spotted, scrawled, blotched, or entirely overlaid with light brown or chocolate brown. Av. size .80 x .62 (20.3 x 15.7). *Season:* first week in June; one brood.

General Range.—"The whole of Alaska, including (and breeding on) the Pribilof and Aleutian Islands, Unalaska, and the Shumagins; east to Fort Simpson, south in winter thru more western parts of North America to Nevada (Carson City), eastern Oregon, Colorado, western Kansas, etc." (Ridgway).

Range in Washington.—Presumably of more or less regular occurrence in winter on the East-side. Casual west of the Cascades.

Authorities.—"Lapland Longspur," Johnson, Rep. Gov. W. T. 1884 (1885) 22.] Dawson, Auk, Vol. XXV, Oct. 1908, p. 483.

BY all the rules this bird should be abundant in winter in the stubble fields of the Palouse country, if not upon the prairies of Pierce, Thurston, and

Chehalis Counties. Bendire reported them from Camp Harney in eastern Oregon, and Brooks says they are common on Sumas Prairie, B. C.; but we have only one authentic record for this State, that of a straggler taken near Seattle in October, 1907. These Longspurs abound in Alaska during the nesting season, but it would appear that the mountain barriers habitually deflect their autumnal flight to the eastward, and that the few which reach us straggle down the coast.

Those who have seen Iowa prairies give up these birds by scores and hundreds every few rods, have been able to form some conception of their vast numbers, but it remained for the storm of March 13-14, 1904, to reveal the real order of magnitude of their abundance. An observer detailed by the Minnesota State Natural History Survey estimates that a million and a half of these "Lapland" Longspurs perished in and about the village of Worthington alone; and he found that this destruction, tho' not elsewhere so intense, extended over an area of fifteen hundred square miles.

In spite of such buffetings of fortune, those birds which do reach Alaska bring a mighty cheer with them to the solitudes. As Nelson says: "When they arrive early in May the ground is still largely covered with snow with the exception of grassy spots along southern exposures and the more favorably situated portions of the tundra, and here may be found these birds in all the beauty of their elegant summer dress. The males, as if conscious of their handsome plumage, choose the tops of the only breaks in the monotonous level, which are small rounded knolls and tussocks. The male utters its song as it flies upward from one of these knolls and when it reaches the height of ten or fifteen yards, it extends the points of its wings upwards, forming a large V-shaped figure, and floats gently to the ground, uttering, as it slowly sinks, its liquid tones, which fall in tinkling succession upon the ear, and are perhaps the sweetest notes that one hears during the entire spring-time in these regions. It is an exquisite jingling melody, having much less power than that of the Bobolink, but with the same general character, and, tho' shorter, it has even more melody than the song of that well known bird."

No. 38.

WESTERN LARK SPARROW.

A. O. U. No. 552a. *Chondestes grammacus strigatus* (Swains.).

Synonyms.—QUAIL-HEAD. WESTERN LARK FINCH.

Description.—*Adult*: Head variegated, black, white, and chestnut; lateral head-stripes black in front, chestnut behind; auriculars chestnut, bounded by rictal and post-orbital black stripes; narrow loreal, and broader submalar black stripes; malar, superciliary, and median stripes white, the two latter becoming buffy

behind; upper parts buffish gray brown, clearest on sides of neck, streaked by blackish brown centers of feathers on middle back and scapulars, persisting as edging on the fuscous wings and tail; tail-feathers, except middle pair, broadly tipped with white; below white, purest on throat and belly, washed with grayish buff on sides and crissum, also obscurely across fore-breast, in which is situated a central black spot. Length 6.25 (158.8); wing 3.35 (85); tail 2.68 (68); bill .47 (12); tarsus .80 (20.3).

Recognition Marks.—Sparrow size; head variegated black, white, and chestnut; fan-shaped tail broadly tipped with white and conspicuous in flight (thus



WESTERN LARK SPARROW.

easily distinguished from the Western Vesper Sparrow with square tail and lateral white feathers).

Nesting.—*Nest*: of grasses, lined with finer grass, rootlets and occasionally horse-hair, on the ground or, rarely, in low bushes or trees. *Eggs*: 5, white, pinkish or bluish white, spotted and scrawled in zigzags and scrolls with dark

browns or purplish blacks, chiefly at the larger end; notably rounded in shape. Av. size .82 x .65 (20.8 x 16.5). *Season*: May 15-June 5; one brood, rarely two.

General Range. Western United States and plateau of Mexico; north to middle British Columbia, Manitoba, etc.; east to eastern border of Great Plains; west to Pacific Coast, including peninsula of lower California; south in winter to Guatemala.



A SAGEBUSH NEST

Range in Washington.—Summer resident east of Cascades only, in Upper Sonoran and Arid Transition zones.

Migrations.—Walla Walla, May 6, 1907; Yakima Co., May 1, 1900; *ibid.*, May 3, 1900; Chelan, May 10, 1896.

Authorities.—["Western lark finch," Johnson, Rep. Gov. W. T., 1884 (1885), 22.] **Belding**, Land Birds Pacific District (1890), p. 148 (Walla Walla, J. W. Williams, 1885). (T.) (C&S.) D¹, D², S¹, S², L.

Specimens.—(U. of W.) C. P.

As in the case of the Sandwich and Savanna Sparrows, the curiously shaped *calcaris* of this bird's head is evidently intended to facilitate concealment. The bill peering out of a weed clump is almost invisible. And yet, as I was once engaged in a sage-clad hillside in Chelan county with an observ-

ing young rancher, my companion halted with a cry. He had caught the gleam of a Lark Sparrow's eye as she sat brooding under a perfect mop of dead broom-sage. The camera was brought into requisition, and the lens pointed downward. The camera-cloth belied and flapped in the breeze, yellow tripod legs waved belligerently, and altogether there was much noise of photographic commerce, but the little mother clung to her eggs. The stupid glass eye of the machine, spite of all coaxing, saw nothing but twigs, and we were obliged to forego a picture of the sitting bird. To get the accompanying picture of eggs, I was obliged to hack away the protecting brush, having first slipped in a handkerchief to protect the nest and contents from showering debris.

The desert harbors many choice spirits, but none (save the incomparable Sage Thrasher) more joyous or more talented than the Lark Sparrow. Whether it is running nimbly along the ground or leaping into the air to catch a risen grasshopper, one feels instinctively that here is a dainty breed. The bird loves to trip ahead coquettishly along a dusty road, only to yield place at last to your insistent steed with an air of gentle reproach. As it flits away you catch a glimpse of the rounded tail, held half open, with its terminal rim of white, and you know you have met the aristocrat of the sage.

Lark Sparrows are somewhat irregular in distribution, but their range



Taken near Chelan.

Photo by the Author

GROUND NEST OF WESTERN LARK SPARROW.

corresponds roughly with the northern extension of the Upper Sonoran zone, with overflow into the adjacent Arid Transition. Altho prairie birds, they are fond of scattered trees, fences, telegraph poles, or anything which will afford sufficient elevation for the sweet sacrament of song.

This bird, more frequently than others, is found singing in the middle of the very hottest days in summer, and at such times his tremulous notes come to the ear like the gurgling of sweet waters. But Ridgway's description has not been surpassed:³ "This song is composed of a series of chants, each syllable rich, loud, and clear, interspersed with emotional trills. At the beginning the song reminds one somewhat of that of the Indigo Bird (*Passerina cyanea*), but the notes are louder and more metallic, and their delivery more vigorous. Tho seemingly hurried, it is one continued gush of sprightly music; now gay, now melodious, and then tender beyond description,—the very expression of emotion. At intervals the singer falters, as if exhausted by exertion, and his voice becomes scarcely audible; but suddenly reviving in his joy, it is resumed in all its vigor, until he appears to be really overcome by the effort."

These gentle birds are evidently profiting somewhat by the human occupation of the soil, and adapt themselves readily to changed conditions. They are reported as breeding in the valley of the Willamette in Oregon, but we have no records of their occurrence in Washington west of the Cascades.

No. 39.

WESTERN VESPER SPARROW.

A. O. U. No. 540a. *Poocetes gramineus continis* Baird.

Synonyms.—WESTERN GRASS FINCH. BAY-WINGED BUNTING.

Description.—*Adults*: General tone of upperparts slaty or grayish brown on the edges of the feathers, modified by the dusky centers, and warmed by delicate traces of rufous, bend of wing bay, concealing dusky centers; wings and tail fuscous with pale tawny or whitish edgings,—outer tail-feathers principally or entirely white, the next two pairs white, or not, in varying amount; below sordid white, sharply streaked on breast, flanks, and sides with dusky brown; the chin and throat with small arrow marks of the same color and bounded by chains of streaks; auriculars clear hair-brown, with buffy or lighter center; usually a buffy suffusion on streaked area of breast and sides. Length of adult male: 5.75 (6.25 (146.1-158.8); wing 3.20 (83.6); tail 2.50 (65.8); bill .44 (11.2); tarsus .85 (21.6). Female a little smaller.

Recognition Marks.—Sparrow size; general streaked appearance; white lateral tail-feathers conspicuous in flight; frequents fields and the open sage.

Nesting.—*Nest*: on ground, usually in depression, neatly lined with grasses,

³ "Birds of Illinois," Vol. I, p. 263.

rootlets, and horse-hair. *Eggs*: 4 or 5, pinkish-, grayish-, or bluish-white, speckled, spotted and occasionally scrawled with reddish-brown. Av. size, .82 x .60 (20.8 x 15.2). *Season*: first week in May, second week in June; two broods.

General Range.—Western United States (except Pacific coast district) and Canada north to Saskatchewan east to Manitoba, the Dakotas (midway), western Nebraska, etc.; breeding from the highlands of Arizona and New Mexico northward; in winter from southern California east to Texas and south to southern Mexico.

Range in Washington. East-side, sparingly distributed in all open situations.

Migrations.—*Spring*: Yakima Co. March 15, 1900; Chelan Co. March 31, 1896.

Authorities.—**Dawson**, Auk, XIV. April 1897, p. 178. Sr. D². Ss¹. Ss². J.

Specimens.—P. Prov. C.

A SOBER garb cannot conceal the quality of the wearer, even the Quaker gray be made to cover alike saint and sinner. Plainness of dress, therefore, is a fault to be readily forgiven, even in a bird, if it be accompanied by a voice of sweet sincerity and a manner of self-forgetfulness. In a family where a modest appearance is no reproach, but a warrant to health and long life, the Vesper Sparrow is pre-eminent for modesty. You are not aware of his presence until he disengages himself from the engulfing grays and browns of the stalk-strewn ground or dusty roadside, and mounts a fence-post to rhyme the coming or the parting day.

The arrival of Vesper Sparrow, late in March, may mark the supreme effort of that particular warm wave, but you are quite content to await the further travail of the season while you get acquainted with this amiable newcomer. Under the compulsion of the sun the bleary fields have been trying to muster a decent green to hide the ugliness of winter's devastation. But wherefore? The air is lonely and the sage untenanted. The Meadowlarks, to be sure, have been romping about for several weeks and getting bolder every day; but they are roisterous fellows, drunk with air and mad with sunshine. The winter-sharpened ears wait hungrily for the poet of common day. The morning he comes a low sweet murmur of praise is heard on every side. You know it will ascend unceasingly thenceforth, and spring is different.

Vesper Sparrow is the typical ground bird. He eats, runs, sleeps, and rears his family upon the ground; but to sing—ah, that is different!—nothing less than the tip of the highest sage-bush will do for that; a telegraph pole or wire is better; and a lone tree in a pasture is not to be despised for this one purpose. The males gather in spring to engage in decorous concerts of rivalry. The song consists of a variety of simple, pleasing notes, each uttered two or three times, and all strung together to the number of four or five. The characteristic introduction is a mellow whistled *he-ho*, a little softer in tone

than the succeeding notes. The song of the western bird has noticeably greater variety than that of the eastern. Not only is it less stereotyped in the matter of pitch and duration, but in quality and cadence it sometimes shows surprising differences. One heard in Chelan County would have passed for Brewer's on a frolic, except for the preliminary "hee-ho's": *Heéoo heéoo heéoo buzzkeusskeusszi zeeechee zeeechee*. And indeed it would not be surprising if he had learned from *Spizella breweri*, who is a constant neighbor and a safe guide in matters of sage lore. The scolding note, a thrasher-like kissing sound, *tsook*, will sometimes interrupt a song if the strange listener gets too close. Early morning and late evening are the regular song periods; but the conscientious and indefatigable singer is more apt than most to interrupt the noontide stillness also.

Since this species is a bird of open country and uplands, it cares little for the vicinity of water; but it loves the dust of country roads as dearly as an old hen, and the daily dust-bath is a familiar sight to every traveler. While seeking its food of weed-seeds and insects, it runs busily about upon the ground, skulking and running oftener than flitting for safety. Altho not especially timid it seems to take a sort of professional pride in being able to slip about among the weed stems unseen.



THE ENEMY.

THE RATTLESNAKE IS THE SOURCE OF ALL GROUND-NESTING FEARS.

It is, of course, at nesting time that the sneak-ability of the bird is most severely tested. The nest, a simple affair of coiled grasses, is usually sunk, or chambered in the ground, so that its brim comes flush with the surface. For the rest, the brooding bird seldom seeks any other protection than that of "luck," and her own ability to elude observation when obliged to quit the nest. Her behavior at this time depends largely upon the amount of disturbance to which she is subjected. At first approach of danger she is inclined to stick to her post till the last possible moment, and then she falls lame as she flutters off. But if often frightened, she shrewdly learns to rise at a considerable distance

Two and sometimes three broods are raised in a season, the first in late April, the second in late June or early July. Pastures and fallow grounds are favorite spots for home building, but I have frequently come upon the nests in the open sage, and here oftenest upon hillsides or tops of low ridges.

Altho not averse to the wilderness, there is reason to believe that this bird profits by the advent of civilization, and that its numbers are slowly increasing.

No. 40.

OREGON VESPER SPARROW.

A. O. U. No. 540b. *Poœcetes gramineus affinis* Miller.

Synonyms.—PACIFIC VESPER SPARROW. MILLER'S GRASS FINCH.

Description.—Similar to *P. g. confinis* but smaller and coloration darker, browner above, more distinctly buffy below. Length of adult male about 5.75 (1.46); wing 3.04 (77.2); tail 2.28 (57.9); bill .43 (10.9); tarsus .81 (20.6). Female a little smaller.

Recognition Marks.—As in preceding, less liable to confusion because of absence of Brewer Sparrow, Western Lark Sparrow, etc., from range.

Nesting.—*Nest*: on ploughed ground or under shelter of fern-stalk, fallen branch, or the like; of grasses lined with hair; measures externally 3 inches across by 2 in depth, inside $2\frac{3}{4}$ across by $1\frac{1}{4}$ in depth. *Eggs*: 3 or 4, size and color as in preceding. *Season*: May; one brood, rarely two.

General Range.—Pacific coast district from northern California north to British Columbia (including Vancouver Island); south in winter thru southern California to Cape St. Lucas.

Range in Washington.—Of local occurrence on prairies and in cultivated valleys west of the Cascades—not common.

Migrations.—*Spring*: Tacoma April 9, 1906; April 13, 1907.

Authorities.—*Poœcetes gramineus* Ba[i]rd, Baird, Rep. Pac. R. R. Surv. IX. 1858, p. 447 (part). (T). C&S. Ra. B.

Specimens.—(U. of W.) P. Prov. B. E.

THE appearance of a Vesper Sparrow where trees are the rule is something of an anomaly. Nevertheless, this plains-loving bird seems to do very well in the prairie region south of Tacoma; and it has been here at least long enough to begin to assume the darker garb which characterizes old residents of the Sound region.

The bird is becoming fairly common wherever conditions in the large are suitable for it. I found it in numbers at Dungeness in the spring of 1906; and the agricultural lands of the Skagit are being accepted by this gentle songster as tho duly made and provided.

Mr. Bowles finds that eggs may not be looked for in the vicinity of

Tacoma before the first week in May, and they are not certainly found before the middle of that month. Open prairie is most frequently selected for a site, and its close-cropped mossy surface often requires considerable ingenuity of concealment on the bird's part. Ploughed ground, where undisturbed, is eagerly utilized. At other times a shallow cup is scraped at the base of a small fern, or the protection of a fallen limb is sought.

The eggs, from three to five in number, are perhaps the most handsomely, certainly the most quaintly marked of any in the sparrow family. The ground color is grayish white; and this, in addition to sundry frecklings and cloudings of lavender, is spotted, blotched, and scrawled, with old chestnut.

The female sits closely and sometimes will not leave the nest until removed. She seldom flies at that, but steps off and trips along the ground for some distance. Then she walks about uneasily or pretends to feed, venturing little expression of concern. Curiously, her liege lord never appears, either, in defense of his home, but after the young are hatched he does his fair share in feeding them.

No. 41.

SANDWICH SPARROW.

A. O. U. No. 542. *Passerculus sandwichensis* (Gmelin).

Synonym.—LARGER SAVANNA SPARROW.

Description.—*Adults*: General tone of upper plumage grayish brown—the feathers blackish centrally with much edging of grayish-brown (sometimes bay), flaxen and whitish; a mesial crown-stripe dull buffy, or tinged anteriorly with yellowish; lateral stripes with grayish brown edging reduced; a broad superciliary stripe yellow, clearest over lore, paling posteriorly; cheeks buffy with some mingling and outcropping of dusky; underparts whitish, clearest on throat, washed with buffy on sides, heavily and sharply streaked on sides of throat, breast, sides, flanks and thighs with dusky; streaks nearly confluent on sides of throat, thus defining submalar area of whitish; streaks darkest and wedge-shaped on breast, more diffused and edged with buffy posteriorly; under tail-coverts usually *but not always* with concealed wedge-shaped streaks of dusky; bill dusky or dull horn-color above, lighter below; feet palest; iris dark brown. *Fall specimens* are brighter; the yellow, no longer prominent in superciliary stripe, is diffused over plumage of entire head and, occasionally, down sides; the bend of the wing is pale yellow (or not); the sides are more strongly suffused with buffy which usually extends across breast. Length about 5.75 (146); wing 2.90 (76); tail 2.00 (51); bill .47 (12); tarsus .88 (22.5).

Recognition Marks.—Warbler size (but much more robust in appearance than a Warbler); general streaky appearance; the striation of the head, viewed from before, radiates in twelve alternating areas of black and white (or yellow); larger and lighter than the (rare) Savanna Sparrow (*P. s. savanna*); larger,

darker and browner than the common Western Savanna Sparrow (*P. s. alaudinus*).

Nesting.—Not yet reported breeding in Washington. *Nest* and *eggs* as in *P. s. alaudinus*.

General Range.—"Unalaska Island (also Shumagin islands and lower portion of Alaska peninsula?) in summer; in winter, eastward and southward along the coast to British Columbia, more rarely to Northern California" (Ridgway). Also breeds extensively in western British Columbia and on Vancouver Island (*Auct.* Fannin, Kermode, Dawson).

Range in Washington.—Spring and fall migrant on both sides of the Cascades (sparingly on East-side); (presumably) resident in winter west of the range; possibly summer resident in northwestern portion of State.

Migrations.—*Spring*: April (West-side); South Park April 24, 25, 29, 1894; May (East-side); Yakima Co. May 8, 10, 1894; *Fall*: September.

Authorities.—*Passerculus sandwichensis* Baird, **Baird**, Rep. Pac. R. R. Surv. IX. 1858, p. 445. C&S. Rh. Kb.

Specimens.—U. of W. Prov. C.

THE interrelations and distributions of the *Passerculus sandwichensis* group are not at all clear as yet, but the migrant birds of spring and middle fall are usually of this form, and hail from or are bound for the coast of British Columbia and Alaska. At Blaine I have found them skulking about the fish-trap timbers of Semiahmoo spit, during the last week in September; or hiding in the rank grass which lines the little waterways draining into Campbell Creek. At such times they keep cover until one is almost upon them, and then break out with a frightened and protesting *tss*, only to seek shelter again a dozen feet away.

No. 42.

SAVANNA SPARROW.

A. O. U. No. 542 a. *Passerculus sandwichensis savanna* (Wilson).

Synonyms.—SAVANNAH SPARROW. MEADOW SPARROW. GROUND SPARROW.

Description.—*Adult*: Similar to *P. sandwichensis* but decidedly smaller and darker (usually browner as well), with bill both relatively and absolutely smaller, and with less or less conspicuous yellow in superciliary stripe. Length about 5.60 (142.2); wing 2.68 (68); tail 1.90 (48.2); bill .41 (10.4); tarsus .82 (20.8).

Recognition Marks.—Warbler size; 12-radiant pattern of head; general streakiness of upperparts; sharply streaked on breast and sides; darker.

Nesting.—Has not been discovered breeding in Washington but probably does so. *Nest* and *Eggs* as next.

General Range.—Eastern North America breeding from the northern United States to Labrador and the Hudson Bay country; casual(?) in the Western United States.

Range in Washington.—Imperfectly made out; many birds resident on West-side believed to be of this form.

Authorities.—Bowles and Dawson, Auk, Vol. XXV, Oct. 1908, p. 483.

Specimens.—Bowles, Tacoma, April 28, 1907 (4).

SOME specimens we get on Puget Sound are no larger than typical *Western Savanna*, but are more strongly and brightly colored—handsome enough to be *sandwichensis* proper. Are these resaturated forms the bleached *alaudinus*, so long resident in the wet country as to be now reassuming the discarded tints of old? Are they, rather, intergrades between *P. s. sandwichensis* and *P. s. alaudinus*, theoretically resident on the lower Sound and in B. C.? Or are they casual overflows of true *savanna*, ignorant of our western metes and bounds? I do not know. Tweedledum or tweedledee? Here is a fine problem for the man with a gun, to whom a new subspecies is more than the lives of a thousand innocents. But I disclaim all responsibility in the matter.

No. 43.

WESTERN SAVANNA SPARROW.

A. O. U. No. 542b. *Passerculus sandwichensis alaudinus* (Bonap.).

Synonymi.—GRAY SAVANNAH SPARROW.

Description.—Similar to *P. s. savanna* but decidedly paler and grayer; less bay or none in edging of feathers of upperparts; yellow of superciliary stripe usually paler, sometimes nearly white; bill longer and relatively weaker. Other dimensions about as in *P. s. savanna*.

Recognition Marks.—As in preceding—*paler*.

Nesting.—*Nest:* in grassy meadow, of dried grasses settled deeply into dead grass or, rarely, into ground. *Eggs:* 4 or 5, grayish white to light bluish green, profusely dotted or spotted and blotched with varying shades of brown and slate, sometimes so heavily as to conceal the ground color. Av. size, .75 x .55 (19 x 13.97). *Season:* third week in May; one brood.

General Range.—Western North America from the eastern border of the Great Plains breeding from the plateau of Mexico to northwestern Alaska; in winter south to Lower California and Guatemala.

Range in Washington.—Both sides of the Cascades in low-lying meadows. Perhaps sparingly resident in winter on West-side.

Migrations.—*Spring:* About April 1st; Bremerton March 23, 1906.

Authorities.—*Passerculus alaudinus* Bonap. **Baird**, Rep. Pac. R. R. Surv. IX. 1858, 447. T. C. S. L., Rh. Ka. Kk, J. B. E.

Specimens.—U. of W. P., Prov. B.

NOT every bird can be a beauty any more than every soldier can be a colonel; and when we consider that ten times as many shot-guns are in commission in time of peace as rifles in time of war, we cannot blame a bird for rejoicing in the virtue of humility, envying neither the epaulets of General Blackbird nor even the pale chevrons of Sergeant Siskin. A Savanna

Sparrow, especially the washed-out western variety, is a mere detached bit of brown earth done up in dried grasses; a feathered commonplace which the landscape will swallow up the instant you take eyes off it. To be sure, if you can get it quite alone and very near, you see enough to admire in the twelve-radiating pattern of the head, and you may even perceive a wan tint of yellow in the superciliary region; but let the birdling drop upon the ground and sit motionless amidst the grass, or in a criss-



WESTERN SAVANNA SPARROW.

cross litter of weed-stalks, and sooner far will you catch the gleam of the needle in the haystack.

Savannas are birds of the meadows, whether fresh or salt, and wherever well-watered grasses and weeds abound, there they may be looked for. During migration, indeed, they may appear in most unexpected places. I saw one last year, at Bremerton, which haunted the vicinity of a tiny cemented pond in the center of a well-kept lawn. This bird hopped about coyly, peering behind blades of grass, and affecting a dainty fright at the sight of water, very much as a Chipping Sparrow might have done. In their nesting

habits these little fellows approach more closely to colonizing than any other members of the Sparrow family. Large tracts of land, apparently suitable, are left untenanted; while, in a near-by field of a few acres, half a dozen pairs may be found nesting. More recently the birds have accepted the shelter of irrigated tracts upon the East-side, and their numbers would seem almost certainly to be upon the increase.

To ascertain the presence of these birds, the ear-test is best, when once the song is mastered. The latter consists of a series of lisping and buzzing notes, fine only in the sense of being small, and quite unmusical, *tsut, tsut, tsu tsu tsu tsu tsu*. The sound instantly recalls the eastern Grasshopper Sparrow (*Coturniculus savannarum passerinus*), who is an own cousin; but the preliminary and closing flourishes are a good deal longer than those of the related species, and the buzzing strain shorter.

Love-making goes by example as well as by season, so that when the choral fever is on they are all at it. The males will sing from the ground rather than keep silence, altho they prefer a weed-top, a fence post, or even a convenient tree. The female listens patiently near by, or if she tries to slip away for a bit of food, the jealous lover recalls her to duty by an ardent chase.

The nest is settled snugly in the dead grasses of last year's ungathered crop, and is thus both concealed from above and upborne from below, and is itself carefully done in fine dead grasses.

The sitting bird does not often permit a close approach, but rises from the nest at not less than thirty feet. The precise spot is, therefore, very difficult to locate. If discovered the bird will potter about with fine affection of listlessness, and seems to consider that she has done her full duty in *not* showing the eggs.

No. 44.

DESERT SPARROW.

A. O. U. No. 573 a. ***Amphispiza bilineata deserticola*** Ridgw.

Description.—*Adults*: Above brownish gray, browner on middle of back and on wings; a conspicuous white superciliary stripe bounded narrowly by black above and separated from white malar stripe (not reaching base of bill) by gray on sides of head; lores, anterior portion of malar region, chin, throat and chest centrally black, the last named with convex posterior outline; remaining underparts white tinged with grayish on sides and flanks; tail blackish, the outer web of outermost rectrix chiefly white, the inner web with white spot on tip, second rectrix (sometimes third or even fourth) tipped with white on inner web. Bill dusky; feet and legs brownish black. *Young* birds like adults but without black pattern of head markings; chin and throat white or flecked with grayish; breast streaked with same and back faintly streaked with dusky; some buffy

edging on wing. Length of adults about 5.35 (135.9); wing 2.55 (65); tail 2.48 (63); bill .40 (10); tarsus .75 (19).

Recognition Marks.—Warbler size; grayish coloration; strong white superciliary; black throat distinctive.

Nesting.—Not yet reported from Washington. "*Nest* in bushes, slight and frail, close to the ground; *eggs* 2-5, 0.72 x 0.58 (18.3 x 14.7), white with a pale greenish or bluish tinge, unmarked; laid in May, June and later" (Coates).

General Range.—Arid districts of southwestern United States and northwestern Mexico west from western Texas to California north probably to southern Idaho and Washington; south, in winter to Chihuahua, Sonora and Lower California.

Range in Washington.—Probably summer resident in Upper Sonoran and Arid Transition life-zones; believed to be recently invading State from south.

Authority.—Dawson, Auk, Vol. XXV. Oct. 1908, p. 483.

If one happens to be fairly well acquainted with the licensed musicians of the sage, the presence of a strange voice in the morning chorus is as noticeable as a scarlet golf jacket at church. The morning light was gilding the cool gray of a sage-covered hillside in Douglas County, on the 31st day of May, 1908, and the bird-man was mechanically checking off the members of the desert choir, Brewer Sparrow, Lark Sparrow, Vesper Sparrow and the rest, as they reported for duty, one by one, when suddenly a fresh voice of inquiry, *Blew chee tee tee*, burst from the sage at a stone's cast. The binoculars were instantly levelled and their use alternated rapidly with that of note-book and pencil as the leading features of the stranger's dress were seized upon in order of saliency: Black chin and throat with rounded extension on chest outlined against whitish of underparts and separated from grayish dusky of cheeks by white malar stripe; lores, apparently including eye, black; brilliant white superciliary stripe; crown and back warm light brown.

The newcomer was a male Desert Sparrow and the interest aroused by his appearance was considerably heightened when it was recalled that he was venturing some five hundred miles north of his furthest previously recorded range. This bird, probably the same individual, was seen and heard on several occasions subsequent thruout a stretch of half a mile bordering on Brook Lake. Once a female was glimpsed in company with her liege lord, flitting coquettishly from bush to bush; but the most diligent search failed to discover a nest, if such there was. Nesting was most certainly on the gallant's mind for he sang at faithful intervals. The notes of his brief but musical offering had something of the gushing and tinkling quality of a Lark Sparrow's. A variant form, *where, where, whiterer*, began nicely but degenerated in the last member into the metallic clicking of Towhee.

We have here, in all probability, another and a very conspicuous example

of that northward trend of species which we shall have frequent occasion to remark. The passion of the North Pole quest is not merely a human weakness; it is a deep-rooted instinct which we only share with the birds. There was once a near-Eden yonder, a Pliocene paradise, from which the cruel ice evicted us—birds and men—long, long ago. We go now to reclaim our own.

No. 45.

SAGE SPARROW.

A. O. U. No. 574.1. *Amphispiza nevadensis* (Ridgw.).

Synonyms.—ARTEMISIA SPARROW. NEVADA SAGE SPARROW.

Description.—*Adults*: Upperparts (including auriculars and sides of neck) ashy gray to ashy brown, clearer and grayer anteriorly, browner posteriorly; pileum, back and scapulars sharply and narrowly streaked with black; wings and tail dull black with light brownish or pale grayish edging; the rectrices marked with white much as in preceding species; a supraloral spot, an orbital ring and (usually) a short median line on forehead white; sides of head slaty gray; lores dusky; underparts white, clearest on throat where bounded and set off from white of malar area by interrupted chain of dusky streaks, occasionally with dusky spot on center of breast, marked on sides and flanks with buffy and streaked with dusky; edge of wing pale yellow or yellowish white. Bill blackish above, lighter below; legs dark brown, toes darker; iris brown. *Young*: "Pileum, hind-neck, chest and sides, as well as back, streaked with dusky; otherwise essentially as in adults" (Ridgway). Underparts save on throat sometimes tinged with buff. *Measurements*: adult male about 100 mm. (52.4); wing 51.1 (79); tail 2.95 (75); bill .39 (10); tarsus .84 (21.5). Female a little smaller.

Recognition Marks.—Sparrow; as Thrush; ashy gray; female with throat defined by dusky streaks.

Nesting.—*Nest*: of twigs, sage bark, and "hemp" warmly lined with wool, rabbit-fur, cow-hair or feathers, placed low in crotch of sage bush. *Eggs*: 3-5, usually 4, brownish- or greenish-gray as to ground, dotted, spotted or clouded, rarely scrawled, with chestnut or sepia and with some purplish shell markings. Av. size .80 x .60 (20.3 x 15.2). *Season*: April, June; two broods.

General Range.—Great Basin region of the Western United States, west to eastern base of Sierra Nevada, east to eastern base of Rockies, north (at least) to northern Washington; south, in winter, into southern Arizona, etc.

Range in Washington.—Upper Sonoran and Arid Transition life zones in eastern Washington north at least to the Grand Coulee; summer resident.

Authorities.—"Sagebrush Sparrow" Johnson, Rep. Gov. W. T. 1884 (1885), 22.] *Amphispiza belli nevadensis*, Dawson, Wilson Bulletin, No. 39, June, 1902, p. 65. Sst. Sst.

Specimens.—U. of W. P.

THANK God for the sage-brush! It is not merely that it clothes the desert and makes its wastes less arid. No one needs to apologize for the unclad open, or to shun it as tho it were an unclean thing. Only little souls do this,—those who, being used to small spaces, miss the support of crowding elbows, and are frightened into peevish complaint when asked to stand alone. To the manly spirit there is exultation in mere space. The ground were enough, the mere Expanse, with the ever-matching blue of the hopeful sky. but when to this is added the homely verdure of the untilled ground, the cup of joy is filled. One snatches at the sage as tho it were the symbol of all the wild openness, and buries his nostrils in its pungent branches to compass at a whiff this realm of unpent gladness. Prosy? Monotonous? Faugh! Back to the city with you! You are not fit for the wilderness unless you love its very worm-wood.

The sage has interest or not, to be sure, according to the level from which it is viewed. Regarded from the supercilious level of the man-on-horseback, it is a mere hindrance to the pursuit of the erring steer. The man a-foot has some dim perception of its beauties, but if his errand is a long one he, too, wearies of his devious course. Those who are best of all

fitted to appreciate its infinite variety of gnarled branch and velvet leaf, and to revel in its small mysteries, are simple folk,—rabbits, lizards, and a few birds who have chosen it for their life portion. Of these, some look up to it as to the trees of an ancient forest and are lost in its mazes; but of those who know it from the ground up, none is more loyal than the Sage Sparrow. Whether he gathers a breakfast, strewn upon the ground, among the red, white, and blue, of storkbill, chickweed, and fairy-mint, or whether he explores the crevices of the twisted sage itself for its store of shrinking beetles, his soul is filled with a vast content.

Here in the springtime he soon gets full enough for utterance, and mounts the topmost sprig of a sage bush to voice his thanks. In general character



Taken in Douglas County.

Photo by W. Leon Dawson.

SAGE SPARROW ON NEST.

THIS BIRD WAS NOT THE VICTIM OF THE MISFORTUNE MENTIONED
IN THE TEXT.

the song is a sort of subdued musical croaking, mellow and rich at close quarters, but with little carrying power. The bird throws his head well back in singing, and the tail is carried more nearly horizontal than is the case with most Sparrows. A song from the Yakima country ran: *Heo, chip'pe-way, chip'pe-way, chip'pe-way*, but a common type heard on the banks of the Columbia in Walla Walla County, and repeated upon the northern limit of the bird's range in Douglas County, is *Tup, tup, to weely, chip, tup*. A more pretentious ditty, occupying two seconds in delivery, runs *Hooriedoppety, weeter wee, doodlety poolat'er*,—an ecstasy song, wherein the little singer seems to be intoxicated with the aroma of his favorite sage.

One may search a long time in the neighborhood of the singer—who, by the way, closes the concert abruptly when he realizes that he is likely to give his secret away—before finding the humble domicile a foot or two up in a sage bush. A nest which contained five eggs was composed externally of sage twigs set into a concealed crotch of the bush, but the bulk of it consisted of weed-bark and "hemp" of a quite uniform quality; while the lining contained tufts of wool, rabbit-fur, cow-hair, feathers, and a few coiled horse-hairs. The feathers were procured at some distant ranch, and their soft tips were gracefully upturned to further the concealment of the eggs, already well protected by their grayish green tints.

Another nest, sighted some forty paces away, contained one egg, and we had high hopes of being able to secure photographs upon our return with the camera. But a few rods further we came upon a crew of sneaking Magpies, scouring the sage with a dozen beady eyes, and passing sneering or vulgarly jocose remarks upon what they found. When we returned, therefore, a day or two later, we were not surprised to learn that the feathered marauders had preferred egg-in-the-bill to souvenir photographs.

No. 46.

SLATE-COLORED JUNCO.

A. O. U. No. 567. *Junco hyemalis* (Linn.).

Synonyms.—SNOW-BIRD. EASTERN SNOW-BIRD.

Description.—*Adult male in summer:* Upperparts, throat and breast slate-color deepening to slaty-black on pileum, the bluish tinge lacking on wings and tail; below, abruptly white from the breast, the flanks ashy slate; the two outer pairs of tail-feathers entirely, and the third pair principally white; bill flesh-color, usually tipped with black. *Adult female:* Similar to male; throat and breast paler; a brownish wash over the upperparts, deepest on nape and upper back; wings brownish-rufous rather than black, and sides tawny-washed. *Adult male in winter,* becoming like female, but still distinguishable. Length 6.00-6.50

(152.4-165.1); wing 3.07 (78); tail 2.80 (71.1); bill .49 (12.5). Female averages slightly smaller than male.

Recognition Marks.—Sparrow size; white lateral tail-feathers; hood *slaty* as compared with *J. oreganus* and *J. o. shufeldti*.

Nesting.—Not known to breed in Washington. *Nest* and *eggs* as next.

General Range.—North America, chiefly east of the Rocky Mountains, breeding in the hilly portions of the Northern States (east of the Rockies) north to the Arctic Coast and west to the valleys of the Yukon and Kowak Rivers, Alaska; south in winter as far as the Gulf States and sparingly over the Western States to California, Arizona, etc.

Range in Washington.—Casual during migrations; may winter rarely in company with *J. oreganus*.

Authorities.—*Not previously published:* W. T. Shaw in *epist.* Dec. 1, 1908. J. H. Bowles in *epist.* Jan. 19, 1909.

Specimens.—P¹.

THIS the familiar Snow-bird of the East is occasionally seen west of the Rocky Mountains in winter and during migrations, specimens having been taken at Sumas, B. C., by Mr. Allan Brooks, and at Corvallis, Oregon, by Mr. A. R. Woodcock, in addition to the one reported from Pullman. It is not impossible that the bird is more common than we have been supposing, because, when found, it appears to be mingling freely with flocks of allied species, quite unaware of the fact that such actions are of interest to inquisitive bird-men.

No. 47.

OREGON JUNCO.

A. O. U. No. 567a. **Junco oreganus** (Towns.).

Synonyms.—"OREGON SNOW-FINCH." WESTERN SNOW-BIRD. OREGON SNOW-BIRD. TOWNSEND'S JUNCO.

Description.—*Adult male:* Head and neck all around and chest (abruptly defined along convex posterior edge) sooty black; back and scapulars and edging of tertials warm reddish brown (nearly walnut brown); rump, upper tail-coverts and middle and greater wing-coverts slaty gray or ashy gray, sometimes glossed with olivaceous; wings and tail dusky, edged with ashy; the outermost rectrix wholly and the second chiefly touched with white, the third pair touched with white near tip; sides of breast, sides and flanks strongly washed with pinkish brown (vinaceous cinnamon); remaining underparts (below chest) white. Bill pinkish white with dusky tip; iris claret red. *Adult female:* Head and neck all around and chest scarcely contrasting in color with upperparts but changing from warm brown (bister) above to dull slaty overlaid with brownish on throat and chest; brown of back (bister or dull sepia) without reddish tinge; white on second rectrix not so extensive as in male; wash of sides duller, not so vinaceous.

Young.—Top of head and hind-neck grayish brown streaked with dusky, back and scapulars warmer brown streaked with black; throat, chest, sides and flanks pale buffy brown streaked with blackish; otherwise as in adult. Length of adult males about 6.35 (161.3); wing 2.95 (75); tail 2.56 (65); bill .43 (11); tarsus .83 (21). Females smaller.

Recognition Marks.—Sparrow size; black of head and throat contrasting with white of breast; white lateral tail-feathers; head *black* as compared with *J. hyemalis*; back *reddish brown* as compared with *J. o. shufeldti*.

Nesting.—*Nest*: on ground at base of small bush or under fallen branch, sometimes in open wood or set into brushy hill-side, of dead grasses and weed stems, scantily lined, or not, with hair; dimensions $2\frac{1}{2}$ inches wide by $1\frac{1}{2}$ inches deep inside. *Eggs*: 2-5, usually 4, varying in ground color from pure white to pinkish white or pale blue, spotted or freckled and blotched with light reddish brown or brownish black, with occasional light cloudings of lavender; long oval to short ovate; variable in size, .80 x .60 (20.3 x 15.2) to .73 x .56 (18.5 x 14.2). *Season*: fourth week in April to first week in July or August according to altitude; two or three broods.

General Range.—Pacific Coast district; in summer from southern British Columbia north to Yakutat Bay, Alaska; in winter south irregularly to California (Santa Cruz and San Mateo counties), straggling across the Cascade-Sierras into interior.

Range in Washington.—Formerly summer resident, now chiefly migrant and winter resident west of the Cascades; winter resident and migrant east of Cascades.

Authorities.—? Townsend, Journ. Ac. Nat. Sci. Phila. VII., 1837, 188 (part). *Junco oregonus* Selater, **Baird**, Rep. Pac. R. R. Surv. IX., 1858, 467. T. C. & S. L. Rh. D¹. Kb. Ra. D². Kk. B.

Specimens.—U. of W. P¹. Prov. B.

IN speaking of Juncos it is necessary to distinguish between the rufous-backed bird of winter, the Oregon Junco proper, and the brownish-gray-backed bird of summer, the Shufeldt Junco. A dozen years ago *oreganus* was supposed to be the common breeding bird of Puget Sound and the neighboring foothills, altho Shufeldt's was well known in the more open situations. Latterly, however, there has not been any authentic account of the nesting of the red-backed bird within the State. 1903 witnessed its last appearance as a summer bird, and that only in the highlands. Recent specimens taken during the breeding season at places so remote from each other as the prairies of Pierce County, the banks of the Pend d'Oreille in Stevens County, and the High Cascades in Whatcom County, have all proven to be *J. o. shufeldti*.

The fact appears to be that we have detected a Washingtonian instance of that northward trend of species clearly recognizable in the East, but obscured to our vision heretofore in the West by reason of varied conditions and insufficient data. The theory is that the birds are still following the retreat of the glacial ice. We know that the glacial ice-sheet, now confined

to Greenland and the high North, once covered half the continent. In our own mountains we see the vestigial traces of glaciers which were once of noble proportions. We know that the southward advance of the continental ice-sheet must have driven all animal life before it; and, likewise, that the territory since relinquished by the ice has been regained by the animals. What more natural than that we should witness thru close observation the northward advance of those varieties of birds which are best suited to withstand cold, and the corresponding occupation of abandoned territory on the part of those next south?

Juncoes, moreover, are erratic in their migrations, and in the West, at least, tend to become non-migratory. While Oregon Juncoes are the common winter birds of Puget Sound, Shufeldt's are not entirely absent at this season, and we may even look to see them hold their own thruout the year. The problem is further complicated by what we call vertical migration, by which is meant that mountain birds descend to the valleys in winter instead of flying southward. Our winter Shufeldts, therefore, may or may not be strictly resident on, say, Steilacoom Prairie. The summer birds may retire to California; the winter birds may have descended from the Olympics or Mount Rainier.

No. 48.

SHUFELDT'S JUNCO.

A. O. U. No. 567b. *Junco oreganus shufeldti* (Coale).

Synonyms.—WASHINGTON JUNCO. HYBRID SNOW-BIRD (COUES). ROCKY MOUNTAIN JUNCO (COUES).

Description.—*Adults:* Similar to *J. oreganus* but back (in males) grayish, or grayish-brown to sepia; in females sepia to drab; black of head and throat more slaty; also averaging larger. Length: 6.00-6.50 (152.4-165); wing 3.15 (80); tail 2.72 (69); bill .43 (11); tarsus .83 (21).

Recognition Marks.—Sparrow size; black of head and throat contrasting with brownish-gray of back and with white of breast; *grayer* on back than preceding.

Nesting.—*Nest:* much as in preceding, occasionally placed at moderate heights in trees. *Eggs:* 4 or 5, pale bluish white, spotted and blotched with light reddish brown and lavender, usually in light ring, occasionally in confluent mass about larger end; size larger than preceding. Av. 80 x .60 (20.3 x 15.2). *Season:* fourth week in April to August according to altitude; two broods.

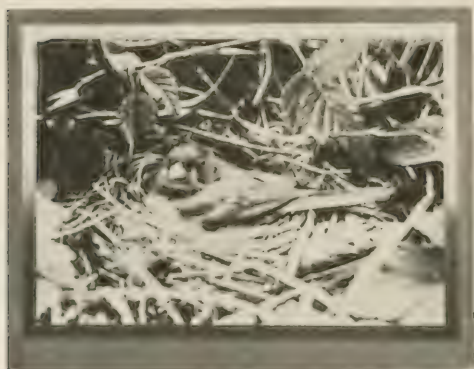
General Range.—Breeding from northern Oregon north into British Columbia east to mountains of Alberta and Idaho; south in winter over Rocky Mountain plateau region to Mexico,—northern California.

Range in Washington.—Common summer resident thruout the State, in or near coniferous timber, from sea level to limit of trees; sparingly resident in winter chiefly west of Cascades.

Authorities.—As in preceding. (T), C&S, Sr. Ra, D., J. B. E

Specimens.—U. of W. P., B. Bn.

HOWEVER it may fare with the Oregon Junco (q. v.), the southern invaders, the birds with the rusty gray backs, now appear to possess the land. They have stolen back sometime in March, so unobtrusively we scarcely noticed when the substitution of gray-backs for red-backs was effected; but soon we do notice that the yards and clearings are frequented by happy



Shufeldt Junco. (T) C&S, Sr. Ra, D., J. B. E

SHUFELDT JUNCO ON NEST

rollicking troops of Shufeldt Juncos, and we notice too that some pronounced flirtations are being carried on.

There is a jovial restlessness about these birds in flock which is contagious. Their every movement is accompanied by a happy titter, and the pursuit of necessities is never so stern that a saucer dare from one of their number will not send the whole company off pell-mell like a route of school-boys. Whenever a Junco starts to wing,

it flashes a white signal in the lateral tail-feathers; and this convenient "recognition mark" enables the birds to keep track of each other thruout the maddest gambols in brush-lot or tree-top.

On a sunny day in March the Juncos gather for a grand concert. The males mount the bush-tops and hold forth in rival strains, while the females lurk under cover and take counsel of their hearts. Junco's song is a sweet little tinkling trill, not very pretentious, but tender and winsome. Interspersed with this is a variety of sipping and suckling notes, whose uses are hard to discern. Now and then, also, a forcible kissing sound may be heard, evidently a note of repulsion instead of attraction, for it is employed in the breeding season to frighten enemies. During the progress of the concert some dashing young fellow, unable fully to express his emotion in song,

runs amuck, and goes charging about thru the woodsy mazes in a fine frenzy—without, however, quite spilling his brains. Others catch the excitement and the company breaks up in a mad whirl of amorous pursuit.

At the end of the brief song period, Juncos deploy thruout the half-open woods or prairie borders of the entire State, from sea-level to timber-line. The variety and interest of their nesting habits are scarcely exceeded by those of any other bird. In general they appear to be guided by some thought of seclusion or protection in their choice of nesting sites. Steep hillsides or little banks are, therefore, favorite places, for here the bird may excavate a cool grotto in the earth, and allow the drapery of the hillside, mosses and running vines, to festoon and guard the approaches. At

Newport we found them nesting in the road-cuts. At Snoqualmie the side of a haystack sheltered a confiding pair. At Tacoma the birds nest at the base of tiny clumps of oak, or under the shelter of brush-piles. Several



Taken in Tacoma.

Photo by the Author

UNDER A TIN ROOF
THE NEST IN THE CAN CONTAINS 11

woodland pool; but on the first occasion it took the parent bird exactly half an hour to go thru all the feints and preliminaries before she ventured on the final plunge. There were half-grown babies in this nest, and since we were in summer camp (at Glacier, near the foot of Mt. Baker), I resolved to make friends of this promising family with a view to portraiture.

As I sat next day watching my Juncoes, and waiting for the sun to get around and light up the vicinity of the nest, the call to dinner sounded. The mother bird, not without much misgiving and remonstrance, had just visited her babies, so I rose to go; but as I did so, caught sight of a stout garter snake, who lay watching the scene from a distance of fully twenty feet, a wicked gleam of intelligence in his eye. With quick suspicion of his purpose, I seized stones and hurled at his retreating form; but the ground was rough and he managed to escape into a large brush-pile. At table I ate hurriedly, listening the while for the faintest note of trouble. When it came, a quick outcry from both parents, instead of premonitory notes of discovery, I sprang to my feet, clutched a stick, and rushed down to the spring. Alas for us! Satan had found our Eden! The nest was emptied and the snake lay coiled over it in the act of swallowing one of the little birds. Not daring to strike, I seized him by the throat and released the baby Junco, whose rump only had disappeared into the devouring jaws. Then with the stick I made snake's-head jelly on a rock and flung the loathsome reptile away. But it was all too late. One young bird lay drowned upon the bottom of the pool, and the other (I think there were only two) soon died of fright and the laceration of the hinder parts attendant upon ophidian deglutition. It was all so horrible! the malignant plan, the stealthy approach, the sudden alarm, the wanton destruction of the fledglings, the grief of the agonized parents, the remorse of the helper who came too late! Is it any wonder that our forbears have pictured the arch-enemy as a serpent?

No. 49.

WESTERN TREE SPARROW.

A. O. U. No. 559 a. *Spizella monticola ochracea* Brewster.

Description.—*Adults*: Pileum, a streak behind eye and a small patch on side of chest cinnamon-rufous or light chestnut; a superciliary stripe and remaining portions of head and neck clear ashy gray; throat and chest of same shade superficially but duller by virtue of concealed dusky; an ill defined spot of dusky in center of lower chest; remaining underparts dull white washed on sides with brownish; general color of upperparts light buffy grayish brown, much out-cropping black on back, scapulars and tertials; some rusty edging on back feathers, scapulars and greater wing-coverts; middle and greater wing-coverts

tipped with white, forming two conspicuous bands; flight feathers and rectrices grayish dusky margined with whitish and buffy. Bill blackish above, yellow, tipped with dusky, below; legs brown, feet darker; iris brown. *In winter* the cinnamon-rufous of crown is slightly veiled, especially along median area, by ashy skirting of feathers, and the buffy of upperparts inclines to strengthen. Length about 6.00 (152.4); wing 3.00 (76); tail 2.68 (68); bill .39 (10); tarsus .82 (20.8).

Recognition Marks.—Sparrow size; resembles Western Chipping Sparrow but much larger; white wing-bars with chestnut of crown distinctive.

Nesting.—Does not breed in Washington. "*Nest*, in low bushes or on the ground, loosely constructed of bark strips, weeds and grasses, warmly lined with feathers. *Eggs*, 4-6, or even 7, pale green, minutely and regularly sprinkled with reddish brown spots" (Cones). Av. size, .75 x .60 (19.1 x 15.2).

General Range.—Breeding from the valley of Anderson River, near the Arctic coast westward thru Alaska to coast of Bering Sea, and for an undetermined distance southward; in winter south thru western North America to Arizona, Texas, etc., eastward across Rocky Mts. to Great Plains (Ridgway).

Range in Washington.—Not common winter resident and migrant. Has not recently been reported west of the Cascades.

Authorities.—Brewster, Bull. Nutt. Orn. Club, VII, 1882, pp. 227, 228.
Cass, S. D.

Specimens.—(U. of W.). P. Prov.

"THE sight of the first Tree Sparrow in the fall serves perfectly to call up a vision of impending winter. Here are the hurrying blasts, the leaden skies, the piling snow-drifts, all ready to make the beholder shiver. But here, too, in some unburied weed patch, or thicket of rose-briars, is a company of Tree Sparrows, stout-hearted and cold-defying, setting up a merry tinkling chorus, as eloquent of good cheer as a crackling Yule-log. How many times has the bird-man hastened out after some cruel cold snap, thinking, 'Surely this will settle for my birds,' only to have his fears rebuked by a troop of these hardy Norsemen revelling in some back pasture as if they had found their Valhalla on this side the icy gates. Ho! brothers! here is food in these capsules of mustard and cockle; here is wine distilled from the rose-hips; here is shelter in the weedy mazes, or under the soft blanket of the snow. What ho! Lift the light song! Pass round the cup again! Let mighty cheer prevail!" (Birds of Ohio).

Truth to tell, the Western Tree Sparrows are somewhat rare winter visitors, in eastern Washington only. In habits they do not appear to differ materially from the typical form, which is very abundant in winter throughout the northern tier of eastern states. In the nature of the case, while with us, their food, consisting as it does of grass- and weed-seeds and dried berries, is found near the ground; and so, for the season, the name Tree Sparrow seems inconsistent. When persistently annoyed, however, the flock will rise

to the tree-tops in straggling fashion, and there either await the withdrawal of the intruder, or else make off at a good height.

The song of the Tree Sparrow is sweet and tuneful, affording a pleasing contrast to the monotonous ditty of the Western Chipping Sparrow. Snatches of song may be heard, indeed, on almost any mild day in winter; but the spring awakening assures a more pretentious effort. A common form runs, *Sweet-ho, sweet, sweet, sweet*, with notes of a most flattering tenderness. But we may only guess at the bird's full powers, for the home-making is in Alaska.

No. 50.

WESTERN CHIPPING SPARROW.

A. O. U. No. 560 a. *Spizella passerina arizonæ* (Coes).

Synonyms.—CHIPPY. HAIR-BIRD.

Description.—*Adult*: Crown bright chestnut; extreme forehead black with ashy median line; a light ashy superciliary stripe; lore and postocular streak black; underparts and sides of head and neck ashy gray, dullest on breast and sides, clearest on throat where nearly white; hind-neck and wings bluish ash, the former more or less streaked with blackish; back and scapulars light brown (isabella color) heavily streaked with black; wings and tail fuscous. Bill dark; feet light; iris brown. *Young birds* are streaked with dusky above and below and lack the chestnut of crown. Length of adult males: 5.00-5.50 (127-139.7); wing 2.83 (72); tail 2.36 (60); bill .39 (10); tarsus .67 (17). Females smaller.

Recognition Marks.—Warbler size; chestnut crown and whitish superciliary distinctive.

Nesting.—*Nest*: A compact or careless structure of fine twigs, grasses, and (most commonly and often exclusively) rootlets, heavily lined with horse-hair; placed in sage-bush, wild rose thicket or shrubbery, or else on horizontal branch of apple tree or evergreen. *Eggs*: 3-5, usually 4, greenish blue speckled freely or in narrow ring about larger end with reddish brown and black. Av. size, .71 x .51 (18 x 13). *Season*: April-July, usually May and June; two broods.

General Range.—Western North America from the Rockies to the Coast breeding from the southern border of the United States north to the Yukon Valley in Alaska, east over the western provinces of Canada; south in winter to Mexico and Lower California.

Range in Washington.—Common summer resident thruout the State chiefly in settled portions and more open situations.

Migrations.—*Spring*: Yakima, April 12, 1900; Chelan, April 24, 1896; Tacoma, April 12, 1905, April 11, 1906.

Authorities.—*Spizella socialis* Bonap. Baird, Rep. Pac. R. R. Surv. IX. 1858: 173, 1907. T. O. S. D., R. D. S., K. I. B. E.

Specimens.—U. of W. Pr. Prov. B. E.

SOFT all land, we live, and even in the "immutable Latin," but the one bird, we mention, this is *spizella socialis arizonae*, which we may treat as the state as the friendly little sparrow of the desert. An obscure little fellow he is to eve, a skit done in faded browns, with a chestnut crown which still does not differentiate the owner from a withered corymb in his native sage. Of the desert he is, for there is no sage-brush wilderness too dreary to boast the presence of at least a few Chipping Sparrows. And friendly he is, beyond question, for there are few doerds in the eastern part of the State where this bird is not a trustful visitor, and his presence in western Washington is nearly coextensive with that of man. For altho the Chipping Sparrow has become scarce in the greater region of Pierce and adjacent counties it is instructive to note that its presence goes into evidence of resaturat-



THE WESTERN CHIPPING SPARROW

OF THE SPARROW

OF THE SPARROW

tends him to sustained effort thruout the sunny hours when more brilliant songsters are sinking in the shade; and for this we come to prize him, altho we like the sound of hissing waters.

Two Chipping Sparrows, some have near Tacoma deserve special mention. One likened itself in our very presence to a bird being pressed, and the other, the other, a bird, placed on its territory which strike

or of departure from the bleached type, as would be the case if it belonged to one of the really "old fannies."

OF THE SPARROW

Whether this warbler, Chipping seems to be about the early day in April, perched himself on the tip of a thin branch, like a brave little Christmas candle, and proceeds to sputter in the same part. Of all homely sounds the monotonous trill of the Western Chipping Sparrow is the most homely,—and the most easily forgivable.

As music it scarcely ranks above the rattle of castanets; but the little singer pours out his soul full earnestly, and his ardor often

against the tool with additional force and serves to mark a single revolution, but the continuous burr which underlies the accented points, or trill-crest, is satisfied by this comparison alone. The other effort, a peculiar buzz of varying intensity, carries forward the same idea of continuous sound, but the comparison changes. In this the song appears to pour from the tiny throat without effort, and its movement is as tho an unseen hand controlled an electric buzz, whose activity varies with the amount of "juice" turned on:

ZZZZZZZZZZZ, ZZZZZZZZZZ, ZZZZZZZZZZ, ZZZZZZZZZZ, ZZZZZZZZZZ,

Chippy's nest is a frail affair at best, altho often elaborately constructed of fine twigs, rootlets and grasses with a plentiful lining of horse-hair. In some instances the last-named material is exclusively employed. A sage-bush is the favorite situation on the plains of the Columbia, a horizontal fir branch in the wet country. Rose thickets are always popular, and where the bird frankly forsakes the wilds, ornamental shrubbery and vines are



Taken near Chelan.

Photo by the Author

"FOUR OF THE CUTEST

street to tell about the "cunningest little nest, you know, with four of the cutest —" "Hold on," we say; "were the eggs blue?" "Yes," "With dots on them?" "Why, yes; how did you know?"

Incubation lasts only ten days and two broods are raised in each season.

chosen. The nests are often so loosely related to their immediate surroundings as to give the impression of having been constructed elsewhere, and then moved bodily to their present site. Some are set as lightly as feathers upon the tips of evergreen branches, and a heavy storm in season is sure to bring down a shower of Chippies' nests.

Eggs are laid during the first or second week of May in the vicinity of American Lake and from one to three weeks earlier in the sage country. They are among the most familiar objects in Nature, and particular description of them ought to be unnecessary. But every person who knows that we are interested in birds has to stop us on the

Chipping Sparrows are very devoted parents and the sitting female will sometimes allow herself to be taken in the hand. The male bird is not less sedulous in the care of the young, and he sometimes exercises a fatherly oversight of the first batch of babies, while his mate is preparing for the June crop.

No. 51.

BREWER'S SPARROW.

A. O. U. No. 562. *Spizella breweri* Cassin.

Description.—*Adults*: Upperparts grayish brown, brightest brown on back, everywhere (save on remiges and rectrices) streaked with black or dusky, narrowly on crown, more broadly on back and scapulars, less distinctly on rump; wing-coverts and tertials varied by edgings of brownish buff; flight-feathers and rectrices dark grayish brown or dusky with some edging of light grayish brown; a broad pale buffy superciliary stripe scarcely contrasting with surroundings; underparts dull whitish tinged on sides and across breast by pale buffy gray. Bill pale brown darkening on tip and along culmen; feet pale brown, iris brown. *Young* birds are less conspicuously streaked above; middle and greater coverts broadly tipped with buffy forming two distinct bands; breast streaked with dusky. Length 5.30 (1.35); wing 2.44 (.62); tail 2.38 (.605); bill .38 (.88); tarsus .68 (.174).

Recognition Marks.—Warbler size; general streaked appearance; *absence* of distinguishing marks practically distinctive; sage-haunting habits.

Nesting.—*Nest*: of small twigs and dried grasses, lined with horse-hair, set loosely in sage-bush. *Eggs*: 4 or 5, greenish blue, dotted and spotted, sometimes in ring about larger end, with reddish brown. *Av. size* .67 x .49 (.17 x .124). *Season*: April, June; two broods.

General Range.—Sage-brush plains of the West, breeding from Arizona to British Columbia and east to western Nebraska and western Texas; south in winter to Mexico and Lower California.

Range in Washington.—Open country of the East-side, abundant summer resident; occasionally invades Cascade Mountains (only in late summer?).

Migrations.—*Spring*: Yakima March 29, 1900.

Authorities.—["Brewer's sparrow," Johnson, Rep. Gov. W. T. 1884 (1885), 22]. Dawson, Auk, XIV, 1897, 178. D^r, Ss^l, Ss².

Specimens.—U. of W. P. C.

IT IS never quite fair to say that Nature produces a creature which harmonizes perfectly with its surroundings, for the moment we yield tribute of admiration to one creature, we discover amid the same circumstances another as nearly perfect but entirely different. When we consider the Sage Sparrow we think that Nature cannot improve much upon his soft grays by way of fitness for his desert environment; but when we come upon the Brewer Sparrow, we are ready to wager that here the dame has done her

utmost to produce a bird of non-committal appearance. Mere brown might have been conspicuous by default, but brownish, broken up by lazy streakings of other brownish or dusky—call it what you will—has given us a bird which, so far as plumage is concerned, may be said to have no mark of distinction whatever—just bird.

The Sage Sparrow fits into the gray-green massy scheme of color har-



NEST AND EGGS OF BREWER SPARROW.

mony in the artemisia, while Brewer's fits into the somber, brown-and-streaky scheme of its twigs and branches. To carry out the comparison, do not look for *brevieri* early in the season, when the breath of the rain rises from the ground and the air is astir; he is there, of course, but disregard him. Wait, rather, until the season is advanced, when the incomparable sun of Yakima has filled the sage-brush full to overflowing, and it begins to ooze out heat in drowsy, indolent waves. Then listen: *H'cececece, tubitubitubitubitub*, the first part an inspired trill, and the remainder an exquisitely modulated expired trill in descending cadence. Instantly one conceives a great respect for this plain dot in feathers, whose very existence may have passed unnoticed before. The descending strain of the common song has, in some individuals, all the fine shading heard in certain imported canaries. Pitch is conceded by infinitesimal gradations, whereby the singer, from some heaven of fancy, brings us down gently to a topmost twig of earthly attainment. Nor does the song in other forms lack variety. In fact, a midday chorus of Brewer Sparrows is a treat which makes a tramp in the sage memorable.

Brewer's Sparrow is of the sage sagey, and its range in Washington is almost exactly co-extensive with the distribution of that doughty shrub; but it is of record that *Spizella brevieri* indulges in some romantic vacations, a specimen being once taken by me (July 25, 1900) at 8000 feet, upon the glacier levels of Wright's Peak.

No. 52.

GOLDEN-CROWNED SPARROW.

A. O. U. No. 557. *Zonotrichia coronata* (Pall.).

Description.—*Adults*: A broad crown stripe gamboge-yellow, changing abruptly to ashy gray on occiput; this bounded on each side by broad stripe of silky black meeting fellow on forehead; remaining upperparts grayish brown, broadly streaked with black on back, more or less edged with dull chestnut on back, wing-coverts and tertials, glossed with olive on rump and tail; middle and greater coverts tipped with white forming conspicuous bars; chin, throat and sides of head ashy gray with obscure vermiculations of dusky; remaining underparts washed with buffy brown, darkest on sides and flanks, lightest, to dull white, on belly, obsoletely and finely barred on breast. Bill blackish above, paler below; feet pale; iris brown. *Immature*: Without definite head-stripe; crown broadly dull olive-yellow, clearest on forehead, elsewhere sharply flecked with blackish in wedge-shaped marks, giving way to grayish brown or dull chestnut behind and to blackish on sides (variably according to age?). Length 7.20 (182.8); wing 3.28 (83.3); tail 3.06 (77.7); bill .48 (12.2); tarsus .66 (24.3).

Recognition Marks.—Sparrow size; yellow of crown distinctive in any plumage.

Nesting.—Does not breed in Washington. *Nest* and *eggs* said to be very similar to those of *Z. l. nuttalli*.

General Range.—Pacific Coast and Bering Sea districts of Alaska; south in winter thru the Pacific States to Lower California; occasionally straggles eastward.

Range in Washington.—Spring and fall migrant both sides of the Cascades, more common westerly.

Migrations.—*Spring*: c. April 21 (West-side); c. May 20 (Chelan).

Authorities.—? *Emberiza atricapilla* Aud. Orn. Biog. V. 1839, 47; pl. 394. Baird, Rep. Pac. R. R. Surv. Vol. IX. 1858, 462. C&S. L². D¹. Kb. Ra. Kk. B. E.

Specimens.—U. of W. Prov. E.

REGAL tho he be, this sparrow is discreet in the matter of appearances, and does not cultivate the public eye. Washington is only a way-station in his travels, and the splendors and liberties of court life are reserved for Alaska. Appearing at Tacoma during the last week in April, demure companies of Golden-crowns may not infrequently be seen associated with migrating Nuttalls. They are in no hurry, or perhaps the haste of midnight flight is over when we see them yawning sleepily in the bushes of a morning. They are languid too as they deploy upon the park lawns, always within reach of cover, in search of fallen seeds or lurking beetles. Their leisurely movements contrast strongly with the bustling activities of the local Nuttalls; for the latter are burdened with the care of children, before the Alaskan migrants have forsworn bachelorhood. East of the Cascade Mountains the northward movement of this species is even more tardy, and May 18-22 are the dates at which I have recorded it at Chelan.

Migrating Zonotrichias are all coquettishly retiring, and the first hint of danger sends them scuttling into the bushes. If one presses up to the edge of the brush, he may hear an uncanny rustling among the leaves and branches as the birds retreat, but not a single note is uttered. Left to themselves, the birds become sociable with many *zinks* common to the genus; and, if unusually merry, the Golden-crowns indulge a sweet, preparatory *hoo hee* which reminds one of both the White-crowned (*Z. leucophrys*) and White-throated (*Z. albicollis*) Sparrows of the East; but the song has never been completed here to our knowledge.

Suckley said that Golden-crowned Sparrows were abundant in summer both at Fort Dalles and Fort Steilacoom, but this was undoubtedly a mistake, as the records of alleged nesting in California proved to be. On the other hand they may winter with us to some extent, since Mr. Bowles took a specimen on December 16, 1907, in the Puyallup Valley.

No. 53.

GAMBEL'S SPARROW.

A. O. U. No. 554a. *Zonotrichia leucophrys gambelii* (Nuttall).**Synonyms.**—INTERMEDIATE-CROWNED SPARROW. INTERMEDIATE SPARROW.

Description.—*Adults*: Crown pure white, becoming gray behind; lateral crown-stripes meeting in front, and post-ocular stripes, jet black, separated by white stripe continuous with lore; remainder of head, neck all around, and entire underparts slaty gray, darkest on nape, whitening on chin and belly, with a tawny wash on flanks and crissum; back and scapulars brown (burnt umber) edged with gray; rump and upper tail-coverts tawny olivaceous; wings and tail fuscous, the tertials dark-centered with edgings of bay and white; middle and greater coverts tipped with white, forming two inconspicuous wing-bars; rectrices with brown shafts and tawny edgings, bill reddish brown above, saffron yellow below, with tip of maxilla black. *Young* of the year have the black of head replaced by light chestnut, and the white by ochraceo-fuscous or gray; in general darker and browner above than adult. Length 6.50-7.00 (165-180); wing 3.07 (78); tail 2.76 (70); bill .42 (10.7); tarsus .80 (22.5).

Recognition Marks.—Sparrow size; broad white crown and jet black lateral stripes strongly contrasting; slightly larger and general coloration lighter than in *Z. l. nuttalli*; white crown-stripe broader.

Nesting.—As next; not known to breed in Washington but probably does so.

General Range.—Western North America, breeding from Montana, eastern Oregon, etc., northward between coast mountains of British Columbia and Alaska and the interior plains to the lower Mackenzie and Anderson River Valleys, thence westward thruout Alaska to the coast of Bering Sea; in winter southward across western United States into Mexico and Lower California, straggling eastward across the Great Plains.

Range in Washington.—Abundant spring and fall migrant on the East-side, possibly summer resident; doubtless migrant west of Cascades, but no specimens taken.

Migrations.—*Spring*: April 20-May 20. Wallula, April 24, 1905; Chelan, April 24, 1896; Brook Lake, June 7, 1908.

Authorities.—*Fringilla gambelii* Nuttall, Man. Orn. U. S. & Canada, 2d Ed., 1, 1840, 556. *Z. gambelii intermedia* Brewster, B. N. O. C. VII, 1882, p. 227. D¹. Sr. D². Kk. J

Specimens.—U. of W. C. P.

IT IS probably safe to say that during the height of their spring migrations, viz., April 15th to May 15th, these birds exceed in numbers all the other sparrows of eastern Washington combined. Indeed, on certain occasions, it would seem that they are more numerous than all other birds combined. And this altho they do not move in great flocks in the open, like Redpolls, but flit and skulk wherever there is show of cover. Wayside thickets, spring draws, and the timbered banks of streams are favorite places. The more isolated the cover the more certain it is to be held as a Zonotrichian

stronghold, and they are sometimes so hard put to it for shelter that they resort in numbers to the sage-brush, where they affect great secretiveness.

These handsome and courtly gentlemen with their no less interesting, if somewhat plainer, wives are far more reserved than their talents would warrant. Our approach has sent a score of them scurrying into cover, a neglected rose-briar patch which screens a fence, and now we cannot see one of them. An occasional sharp *dzink* of warning or protest comes out of the screen, or a suppressed titter of excitement, as two birds jostle in their effort to keep out of sight. We are being scrutinized, however, by twenty pairs of sharp eyes, and when our probation is ended, now one bird and now another hops up to an exposed branch to see and be seen.

What distinguished foreigners they are, indeed, with their white crowns, slightly raised and sharply offset by the black stripes which flank them,—Russians, perhaps, with shakos of sable and ermine. The bird has an aristocratic air which is unmistakable; and, once he has deigned to show himself, appears to expect deference as his due. What a pity they will not make their homes with us, but must needs go further north!

As diligently as I have searched for this species, I have never found a specimen in the summer months^a, nor is there any record of the bird's nesting in Washington. This is the more remarkable in that the type form (*Z. leucophrys*) breeds extensively "thruout the high mountain districts of the western United States" (Ridgway), exclusive of Washington and Oregon, southward to the San Francisco Mountains of Arizona, "northward to northern California (Mount Shasta, etc.)." In view of this, one may feel free to suggest that the Camp Harney record^b, referred to *gambelii*, is really referable to the typical form, and that as such it represents a northern extension of *leucophrys*, rather than a southern extension of *gambelii*.

No. 54.

NUTTALL'S SPARROW.

A. O. U. No. 554 b. *Zonotrichia leucophrys nuttalli* Ridgw.

Synonyms.—Formerly called GAMBEL'S SPARROW. WHITE-CROWNED SPARROW (name properly confined to *Z. leucophrys*). CROWN SPARROW.

Description.—*Adults:* Like preceding but general tone of coloration much darker; streaks of back and scapulars deepest brown or blackish; general ground-color of upperparts light olive-gray; median crown-stripe narrower, dull white;

a. Until the season of 1908. See *ante* under "Migrations."

b. "(?) Bendire, Proc. Bost. Soc. N. H. XIX., 1877, 118 (Camp Harney, e. Oregon, breeding)" (Ridgway).



"A MILITARY GENTLEMAN IN A GRAY CLOAK."

underparts more strongly washed with brownish gray; axillaries and bend of wing more strongly yellow; bill yellowish with dark tip. *Immature:* Similar to that of preceding form, but underparts yellowish; upperparts light olive buff; crown-stripe cinnamomeous, or pale chestnut. *Very young* birds are more extensively black-streaked above, and finely streaked below on chin, throat, chest, and sides; bill brighter yellow; feet paler. Length of adult males, 5.00-6.70 (150-170); wing 2.95 (75); tail 2.83 (72); bill .43 (11); tarsus .93 (23.5). Females smaller.

Recognition Marks.—Sparrow size; black-and-white striping of crown distinctive in range; much darker than preceding.

Nesting.—*Nest:* on ground or low in bushes; rarely in trees up to 25 feet; a rather pretentious structure of bark-strips, dead grass, and rootlets, with a

lining of fine dead grass and horse-hair; measures externally 6 in. wide by 4 deep; internally $2\frac{1}{2}$ wide by 1 deep. *Eggs*: 4 or 5, pale bluish white, profusely dotted and spotted, or blotched, with varying shades of reddish brown. Av. size .86 x .64 (21.8 x 16.3). *Season*: Last week in April, and May 25-June 10; two broods.

General Range.—Pacific Coast district, breeding from Monterey, California, to Fort Simpson, British Columbia; south in winter to San Pedro Martir Mountains, Lower California.

Range in Washington.—Of general distribution west of the Cascade Mountains at lower altitudes; casually winter resident.

Migrations.—*Spring*: March 25-April 1.

Authorities.—*Z. gambelii* Gambel, **Baird**, Rep. Pac. R. R. Surv. IX. 1858, 461. (T.) C&S. L¹.(?) L². Rh. Kb. Ra. Kk. B. E.

Specimens.—U. of W. P. B. BN. E.

WHEN you enter a bit of shrubbery at the edge of town in May or June, your intrusion is almost sure to be questioned by a military gentleman in a gray cloak with black-and-white trimmings. Your business may be personal, not public, but somehow you feel as if the authority of the law had been invoked, and that you would better be careful how you conduct yourself in the presence of this military person. Usually retiring, the Nuttall Sparrow courts exposure where the welfare of his family is in question, and a metallic scolding note, *zink*, or *dzink*, is made to do incessant service on such occasions. A thoroly aroused pair, worms in beak, and crests uplifted, may voice their suspicions for half an hour from fir-tip and brush-pile, without once dis-closing the whereabouts of their young.

Nuttall's Sparrow is the familiar spirit of brush-lots, fence tangles, berry patches, and half-open situations in general. He is among the last to quit the confines of the city before the advancing ranks of apartment houses and sky-scrapers, and he maintains stoutly any vantage ground of vacant lot, disordered hedge-row, or neglected swamplet left to him. After the Rusty Song Sparrow, he is perhaps the commonest Sparrow in western Washington—unquestionably so within the borders of settlement.

As a songster this Sparrow is not a conspicuous success, altho he works at his trade with commendable diligence. He chooses a prominent station, such as the topmost sprig of a fir sapling, and holds forth at regular intervals in a prosy, iterative ditty, from which the slight musical quality vanishes with distance. *Hec ho, chee weé, chee weé chee weéé* and *Hec, weudge, i-weudge i-weudge i-weééé* are vocalized examples. The preliminary *hec ho* is sometimes clear and sweet enough to prepare one's ear for the Vesper Sparrow's strain, but the succeeding syllables are tasteless, and the trill with which the effort concludes has a wooden quality which we may overlook in



FIGURE 1. — NUTTALL SPARROW.
 FIGURE 2. — NUTTALL SPARROW.

green or bluish green shade, and are heavily dotted, spotted, or flecked with reddish brown.

A second set is prepared a month or so later than the first, and occasionally a third. Second nests are built, as likely as not, in bushes or trees, and Mr. Bowles has taken them as high as twenty-five feet from the ground.

Young birds lack the parti-colored headstripes of the adults, with the pattern is sketched as incipient, and they are best identified by the scolding shrieks of the parents, which attends them every movement. They are rather business-like creatures for all a company of them romping about a pasture range brought a wholesome recollection of school-day days, and there are girls among them, too, for my? how they giggle!

a third but should certainly tolerate as a stranger. We are reminded in case of the usual imitation of this kind when we recall that the case of the White-throated Sparrow (*Zonotrichia*) of which some of a local name is noted for its sweet, pure quality. Surely our bird has caught a bad cold.

In selecting a nesting site, the female displays a marked difference of taste from the Rusty Song Sparrow, in that it selects a dry situation. The first nest prepared during the third week in April, is almost invariably built upon the ground. A slight hollow is scratched in the base of a bush or sapling, and a rather loose structure of bark strip-trial grasses and roots is raised, with a lining of fine grass and horse-hair. It was found one March, and set on high grass at the base of a pine sapling, and was composed externally of dried parrot leaves with a few coarse grasses, internally of fine dried grass of a very light color, supplemented by four or five white wool feathers. The eggs, four or five in number, are of a handsome light

No. 55.

MOUNTAIN SONG SPARROW.

A. O. U. No. 581 b. *Melospiza melodia montana* (Henshaw).

Description.—*Adults*: Crown dull bay streaked with black and divided by ashy-gray median stripe; rufous brown post-ocular and rictal stripes, enclosing grayish-brown auriculars; remaining upperparts ashy-gray varied by reddish brown, the gray due to broad edgings of feathers and occupying from one-half to two-thirds the total area according to season, feathers of back and scapulars sharply streaked with blackish centrally; wings and tail brown varied by minor markings and edgings of dusky, brownish gray and ashy-gray; below white, or sordid, heavily streaked on sides of throat, breast and sides by blackish and rufous, markings wedge-shaped, tear-shaped or elongated, confluent on sides of throat as maxillary stripes and often on center of breast as indistinct blotch. Bill horn-color above, lighter below; feet pale brown, toes darker; iris brown. *Young*: Like adults but duller, all markings less sharply defined, streaks of underparts narrower. Length of adult male (skins): 6.00 (150); wings 2.73 (69.3); tail 2.74 (69.6); bill .48 (12.2); tarsus .88 (22.4).

Recognition Marks.—Sparrow size; heavy streaking of breast and back, with *varied head markings*, distinctive; lighter, grayer and more sharply streaked as compared with *M. m. merrilli*.

Nesting.—As next.

General Range.—"Rocky Mountain district of the United States west to and including the Sierra Nevada, in California; north to eastern Oregon, southern Idaho and southern Montana; south in winter to western Texas and northern Mexico" (Ridgway). Probably also north into British Columbia and southwestern Alberta.

Range in Washington.—Migrant and winter resident along eastern borders.

Authorities.—? Snodgrass, Auk, XX. 1903. 207. W. T. Shaw in *epist*, Dec. 31, 1908. Sr?

Specimens.—P¹ (32 spec.).

WHETHER or not the Song Sparrows of northern Montana and eastern British Columbia are typical *montana*, the doctors must settle; but certain it is that sparrows of a type decidedly lighter, that is, ashier, in coloration, than our *merrilli*, pass thru our eastern borders during migrations. Of such a bird, examined narrowly at Spokane on November 4, 1905, my note-book says (comparing at every point with *merrilli*): "Ashy gray and brown of head strongly contrasting; ashy of back and scapulars very extensive, brown areas of feathers not exceeding one-third their total width; underparts clearer white; streaking lighter rusty and more sharply defined, more narrow on sides."

a. Based upon that of *Melospiza melodia* from which it differs slightly in proportions but chiefly in grayer coloration. The measurements are those of Ridgway, Birds of N. & M. A., Vol. I, p. 358.

No. 56.

MERRILL'S SONG SPARROW.

A. O. U. No. 581 k. *Melospiza melodia merrilli* (Brewster).**Synonyms.**—DUSKY SONG SPARROW. SILVER-TONGUE.

Description.—Characters intermediate between those of *M. m. montana* and *M. m. morphna*. In general, darker than preceding with plumage more blended, proportion of gray in back about one-third; lighter than next, not so brown, streakings more distinct.

Nesting.—*Nest*: a substantial structure of twigs, grasses, coiled bark-strips, dead leaves, etc.; lined carefully with fine dead grass, rootlets or horse-hair, placed indifferently in bushes or on the ground. *Eggs*: 4-6, usually 5, greenish-, grayish-, or bluish-white, heavily spotted and blotched with reddish browns which sometimes conceal the background. *Av. size* .83 x .61 (21 x 15.5). *Season*: April-July; two or three broods.

General Range.—The eastern slopes of the Cascades from northern California to southern British Columbia, east (at least) to northern Idaho.

Range in Washington.—East-side—theoretically inclusive. Specimens from the central valleys of the Cascades may be called *morphna* and those from the Palouse country *montana*, at pleasure.

Authorities.—*M. fasciata guttata*, **Brewster**, Bull. Nutt. Orn. Club, VII. 1882, 227, 229. D^s, Ss^s, J.

Specimens.—P^t.

THIS, the connecting link between *montana* and *morphna*, is the characteristic Song Sparrow of eastern Washington, and abounds along timbered water courses and in all cultivated districts. While closely resembling the Rusty Song Sparrow of the West-side, it may be distinguished from it by the sharper color pattern of its plumage; and the points of divergence from *montana* are maintained with substantial uniformity, at least along the eastern slopes of the Cascades, and in the northern tier of counties.

Altho subjected to considerable rigors in winter, this species is partially resident, being largely confined during the cold season to the shelter of tule beds, wild rose thickets, clematis bowers, and the like. Nesting begins about the second week in April and continues with undiminished ardor till July or August. Incubation requires twelve days, and the young are ready to fly in as many more, so that a devoted pair is able to raise three and sometimes four broods in a season.

At this rate we should be overrun with Song Sparrows if there were not so many agencies to hold the species in check. A young Song Sparrow

is the choice morsel of everything that preys,—cats, skunks, weasels, chipmunks, Sharp-shinned Hawks, Crows, Magpies, Black-headed Jays, and garter snakes. How would this motley company fare were it not for the annual crop of Song Sparrows? And the wonder of it is that the brave heart holds out and sings its song of trust and love with the ruins of three nests behind it and the harvest not yet past.



Taken in Oregon.

Photo by A. W. Anthony.

A PROFESSIONAL OOLOGIST.

A little glimpse of Nature's prodigality in this regard was afforded by a pair which nested on my grounds in the Abtanum Valley. On the 4th of June I came upon a nest in a rose bush, containing four young just hatched, and these almost immediately disappeared—a second, or possibly a third, attempt for the season. On July 4th in an adjoining clump the same pair was discovered with three well-fledged young, which, for aught I know, reached days of self-dependence. On July 24th a nest was found some twenty feet away containing four eggs, which I knew, both by the familiar notes and by elimination, to belong to this pair; but the nest was empty on the day following.

At the beginning of the season nests are frequently made upon the ground under cover of old vegetation, or at the base of protecting bush clumps in swamps. Occasional ground nests may also be found thruout the season. One seen at Stehekin on August 3d was nestled loosely in a recumbent potato vine. At other times any situation in bush or tree, up to twenty feet, is acceptable, if only within convenient reach of water. A

favorite building site is amid the debris of last year's flood water, caught in the willow clumps of creek or lagoon. With high boots one may wade the bed of a brushy creek near Yakima and count certainly on finding a Merrill Song Sparrow's nest every five or ten rods.

No. 57.

RUSTY SONG SPARROW.

A. O. U. No. 581 c. *Melospiza melodia morphna* Oberholser.

Description.—*Adults*: Somewhat like *M. m. montana* but coloration much more rufescent, general color of upperparts rich rusty brown, ashy gray of *M. m. montana* represented by rusty olive and this reduced or (in some plumages) almost wanting; black mesial streaks of scapulars, etc., much reduced, indistinct or sometimes wanting; underparts heavily and broadly streaked with chestnut usually without black shaft lines; sides and flanks washed with olivaceous. "*Young*, slightly rufescent bistre brown above, the back streaked with blackish, beneath dull whitish or very pale buffy grayish, the chest, sides and flanks more or less tinged with buffy or pale fulvous and streaked with sooty brownish" (Ridgway). Length about 6.40 (162.5); wing 2.60 (66); tail 2.56 (65); bill .50 (12.7); tarsus .67 (17).

Recognition Marks.—Sparrow size; rusty brown coloration; heavily spotting of underparts distinctive save for the *Passerella iliaca* group from which it is further distinguished by smaller size and varied head markings.

Nesting.—*Nest*: As in preceding. *Eggs*: usually 4, averaging darker in coloration and larger than in *M. m. merrilli*. Av. size, .87 x .63 (22.1 x 16). *Season*: second week in April to July; two or three broods.

General Range.—"Breeding from extreme southern portion of Alaska through British Columbia (including Vancouver Island) to western Oregon (north of Rogue River Mountains); in winter, south to southern California (Fort Tejon, etc.);" (Ridgway).

Range in Washington.—Common resident west of the Cascades; found chiefly in vicinity of water.

Authorities.—? Audubon, Orn. Biog. V. 1839, 22. *M. rufina*, Baird, Rep. Pac. R. R. Surv. IX, 1858, p. 481. (T). C&S. L. Rh. Kb. Ra. Kk. B. E.

Specimens.—U. of W. P. Prov. B. BN. E.

IF ONE were to write a book about the blessings of common things, an early chapter must needs be devoted to the Song Sparrow. How blessed a thing it is that we do not all of us have to go to greenhouses for our flowers, nor to foreign shores for birds. Why, there is more lavish loveliness in a dandelion than there is in an imported orchid; and I fancy we should tire of the Nightingale, if we had to exchange for him our sweet poet of common day, the Song Sparrow.

Familiar he certainly is; for while he has none of the vulgar obtrusiveness of *Passer domesticus*, nor confesses any love for mere bricks and mortar, there is not a weedy back lot outside of the fire limits which he has not gladdened with his presence, nor a disordered wood-pile or brush-heap which he has not explored. Much lurking under cover in time of rain has darkened his plumage beyond that of the eastern bird, and close association with the fallen monarchs of the forest has reddened it, until he himself looks like a rusty fragment of a mouldering fir log.

It is as a songster, however, that we know this sparrow best. Silver-tongue's melody is like sunshine, bountiful and free and ever grateful. Mounting some bush or up-turned root, he greets his childish listeners with "*Peace, peace, peace be unto you, my children.*" And that is his message to all the world, "*Peace, and good-will.*" Once we sat stormbound at the mouth of our tent, and, mindful of the unused cameras, grumbled at the eternal drizzle. Whereupon the local poet flitted to a favorite perch on a stump hard by, and, throwing back his head, sang, with sympathetic earnestness, "*Cheer up! Cheer up! Count your many mercies now.*" Of course he did say exactly that, and the childish emphasis he put upon the last word set us to laughing, my partner and me, until there was no more thought of complaint.

Even in winter the brave-hearted bird avails himself of the slightest pretext—an hour of sunlight or a rise of temperature—to mount a bush and rehearse his cheerful lay. The song is not continuous, but it is frequently repeated thru periods of several minutes, and is followed by little intervals of placid contemplation.

But no matter how gentle a bird's disposition may be, there is ample use, alack! for the note of warning and distrust. When, therefore, the Song Sparrow's nesting haunts are invaded, the bird emits a *chip* or *chirp*, still musical, indeed, but very anxious. In winter the resident birds deny themselves even this characteristic cry; and, except for the occasional outbursts of full song, they are limited to a high nasal *tss*, which seems to serve the purpose of a flocking, or recognition, call. Song Sparrows are not really gregarious birds; nor are they even seen in close proximity save



SONG SPARROW ASLEEP.

in mating time; but they like to assure themselves, nevertheless, that a dozen of their fellows are within call against a time of need.

Silver-tongue is a bird of the ground and contiguous levels. When hiding, he does not seek the depths of the foliage in trees, but skulks among the dead leaves on the ground, or even threads his way thru log heaps. If driven from one covert, the bird dashes to another with an odd jerking flight, working its tail like a pump-handle, as tho to assist progress. Ordinarily the bird is not fearful, altho retiring in disposition. Apart from the haunts of men the Song Sparrow of western Washington is closely attached to the water; and is not to be looked for save in damp woods, in swamps, in the vicinity of open water, whether of lake or ocean, or along the brushy margins of streams. Indeed, its habits are beginning to assume a slightly aquatic character. Not only does it splash about carelessly in shallow water, but it sometimes seizes and devours small minnows.

Save in favored localities, such as the margins of a tule swamp, nests of the Rusty Song Sparrow are not obtrusively common. "Back East," in a season of all around nesting, about one-fifth of the nests found would be those of the Song Sparrow. Not so on Puget Sound; for, altho the birds are common, heavy cover is ten times more common, and I would sooner undertake to find a dozen Warblers' nests than as many Song Sparrows'. Nesting begins about April 1st, at which time nests are commonly built upon the ground or in a tussock of grass or tules. The end of a log, overshadowed by growing ferns, is a favorite place later in the season; while brush-heaps, bushes, fir saplings, trees, or clambering vines, such as ivy and clematis, are not despised.

The eggs, Mr. Bowles finds, are almost invariably four in number, as in a very large number of sets examined only one contained five eggs. They are of a light greenish blue in ground color, and are spotted and blotched heavily and irregularly with reddish browns, especially about the larger end. Several broods are raised each season.

The Rusty Song Sparrow, because of its abundance in winter, affords the impression of being strictly a resident bird in western Washington. Such may be the case with a majority of the individuals, but there is still evidence of a southward movement of the race, the place of local birds being supplied in winter partly by British Columbia birds, which show a heavier and more uniformly blended type of plumage, approaching that of *M. c. rufina*.

No. 58.

SOOTY SONG SPARROW.

A. O. U. No. 581 f. *Melospiza melodia rufina* (Bonap.).

Description.—Similar to *M. m. morphna* but larger and with coloration darker, more blended; general color of upperparts deep sooty brown or bister, brightening on greater wing-coverts and tertials; back obscurely streaked with darker; median crown-stripe obsolete or at least indistinct; streaking of underparts dark brown. Length 6.50 (165) or over; wing 2.75 (70); tail 2.64 (67); bill .48 (12.3); tarsus .92 (23.5).

Recognition Marks.—Sparrow size; dark brown coloration; plumage of upperparts blended, almost uniform. Requires careful distinction from *Passercella* but is smaller and variegation of head still traceable.

Nesting.—As in preceding. Does not breed in Washington.

General Range.—"Southern Alaska (islands and coast); north to Cross Sound, Glacier Bay, Lynn Canal, etc.; south to north side of Dixon Entrance, in winter to coast of British Columbia, Vancouver Island, and northwestern Washington (Olympic Mountains)" (Ridgway).

Range in Washington.—Winter resident in northwestern portion of State—not common.

Authorities.—*M. cinerea rufina* (Brandt), Ridgway, Birds of North and Middle America, Vol I. p. 374. E.

Specimens.—Prov. E.

THESE larger and darker birds reach our northern borders in winter only, having retired thus far from their home in southern Alaska. Their demeanor while with us is even more modest than that of the local Silver-tongue; and when one is stalking the dank woods of Whatcom County on the *qui vive* for varieties, it requires a second glance to distinguish this Song Sparrow, with its softly blended plumage, from a winter Fox Sparrow.

No. 59.

LINCOLN'S SPARROW.

A. O. U. No. 583. *Melospiza lincolni* (Aud.).

Synonyms.—LINCOLN'S SONG SPARROW. LINCOLN FINCH.

Description.—*Adults:* Above, much like *M. melodia montana*, but crown brighter rufous, and with more decided black markings; back browner and more broadly and smartly streaked with black; the gray of back sometimes with a bluish and sometimes with an olivaceous tinge; below, throat and belly white, the former never quite immaculate, but with small arrow-shaped black marks; sides

of head and neck and remaining underparts creamy buff, everywhere marked by elongated and sharply defined black streaks; usually an abrupt dusky spot on center of breast; bill blackish above, lighter below, feet brownish. Length about 5.75 (146.1); av. of six specimens; wing 2.48 (63); tail 2.11 (53.6); bill .40 (10.2).

Recognition Marks.—Warbler size; bears general resemblance to Song Sparrow, from which it is clearly distinguished by buffy chest-band, and by narrow, sharp streaks of breast and sides.

Nesting.—*Nest*: much like that of Rusty Song Sparrow, of dried grasses, etc., usually on ground, rarely in bushes. *Eggs*: 3 or 4, greenish white spotted and blotched with chestnut and grayish. Av. size, .80 x .58 (20.3 x 14.7). *Season*: June, July; two (?) broods.

General Range.—North America at large breeding chiefly north of the United States (at least as far as the Yukon Valley) and in the higher parts of the Rocky Mountains and the Cascade-Sierras; south in winter to Panama.

Range in Washington.—Imperfectly made out—probably not rare spring and fall migrant, at least west of the Cascades; found breeding in the Rainier National Park.

Authorities.—"Lincoln's Finch," Johnson, Rep. Gov. W. T. 1884 (1885), 22.] Bowles and Dawson, Auk, XXV, Oct. 1908, p. 483.

Specimens.—(U. of W.) Prov. B.

MODESTY is a beautiful trait, and, I suppose, if we had always to choose between the brazen arrogance of the English Sparrow and the shy timorousness of this bird-afraid-of-his-shadow, we should feel obliged to accept the latter. But why should a bird of such inconspicuous color steal silently thru our forests and slink along our streams with bated breath as if in mortal dread of the human eye? Are we then such hobgoblins?

Thrice only have I seen this bird, and then in northern Ohio. On the first occasion two of us followed a twinkling suspicion along a shadowy woodland stream for upwards of a hundred yards. Finally we neared the edge of the woods. There was light! exposure! recognition! With an inward groan the flitting shape quitted the last brush-pile and rose twenty feet to a tree-limb. Just an instant—but enough for our purpose—and he had whisked over our heads, hot-wing upon the dusky back trail. That same May day we came upon a little company of these Sparrows halted by the forbidding aspect of Lake Erie, and dallying for the nonce in the dense thickets which skirted a sluggish tributary. Here they skulked like moles, and it was only by patient endeavor that we were able to cut out a single bird and constrain it to intermittent exposure at the edge of the stream. Here, at intervals, from the opposite bank, we eagerly took note of its head-stripes, pale streaked breast, and very demure airs, and listened to snatches of a sweet but very weak song, with which the bird favored us in spite of

our "persecution." Is it any wonder that the Lincoln Sparrow is so little known to fame?

While rated a regular summer resident of British America and Alaska, Lincoln's Sparrow has also been found breeding in the mountains of eastern Oregon, California, Utah, and Colorado. It ought, therefore to occur in Washington; but we have only to shrug our shoulders and say with the lawyer, *non est incertus*. Indeed, the only positive record we have of the bird's occurrence at any season is that of a specimen taken by A. Gordon Bowles, Jr., in Wright's Park, Tacoma, May 22, 1906.

So much penned in good faith in April, 1908. In June of the same year the good fairy of the bird-man piloted him to a spot where the Lincoln Sparrows were so numerous and so thoroughly at home, that he began to wonder whether he might not have been dreaming after all for the past quarter of a century. Ten or a dozen pairs were found occupying the well-known swamp at Longmire's Springs. On the 30th of June they were much more in evidence than the Rusty Song Sparrows, which occupied the same grassy fastnesses; and altho the females were not done waiting on overgrown babies, the males were loudly urging their second suits.

The song of the Lincoln Sparrow is of a distinctly musical order, being gushing, vivacious, and wren-like in quality, rather than lisping and wooden, like so many of our sparrow songs. Indeed, the bird shows a much stronger relationship in song to the Purple Finch than to its immediate congeners, the Song Sparrows. The principal strain is gurgling, rolling, and spontaneous, and the bird has ever the trick of adding two or three inconsequential notes at the end of his ditty, quite in approved Purple Finch fashion. "*Linkup*,



Taken at
Longmire's
Springs.

JB
Giles photo

LINCOLN'S SONG SPARROW.

ALLAN BROOKS AFTER PHOTO BY THE AUTHOR.

tinkup perly eerly willie willie weeee (dim.)" said one; "Riggle, jiggle, eet eet eet eer oor," another. "Che willy willy willy che quill"; "Lee lee lee quilly willy willy," and other such, came with full force and freshness at a hundred yards to the listeners on the back porch at Longnivre's.

When studied in the swamp, the Lincoln Finches were found to be more reluctant than Song Sparrows to expose themselves, but one pair, anxious for their young, sat out against a clear sky again and again. The bird was seen occasionally to erect its crown feathers in inquiry or excitement, as do Chipping Sparrow, Nuttall Sparrow, *et al.* A Yellow Warbler, stumbling into the manorial bush, was set upon furiously; but she made off philosophically, knowing that her punishment was after the accepted code. A Rusty Song Sparrow, however, was allowed to sit quietly at a foot's remove, not, apparently, because he was so much bigger, nor even because nearer of kin, but rather because of common parental anxiety. The contrast here was instructive; the Lincoln Sparrow being not only smaller but more lightly colored and with a sharp-cut streakiness of plumage. A comparison of many examples showed the similarity of head pattern between the two Sparrows to be very noticeable, while the buffy tinge of the Lincoln's breast would appear to be one of its least constant marks.

An alleged sub-species, Forbush's Sparrow, *M. l. striata*, "Similar to *M. lincolni* but superciliary stripes and upperparts more strongly olivaceous, and dark streaks especially on back and upper tail-coverts, coarser, blacker, and more numerous," has been ascribed to British Columbia and western Washington, but the material at hand is meager and inconclusive, and the proposed form has been passed upon adversely by Ridgway.

No. 60.

KADIAK FOX SPARROW.

A. O. U. No. 585 a (part). *Passerella iliaca insularis* Ridgway.

[*Description of Passerella iliaca unalaschensis* (Shumagin Fox Sparrow).—*Adults*: "Pileum and hindneck brownish gray or grayish brown (nearly hair brown) passing into clear gray (mouse gray or smoke gray) on superciliary region and sides of neck; auricular region brownish gray, with narrow and indistinct shaft streaks of whitish; back, scapulars, and rump plain hair brown; greater wing-coverts, tertials and upper tail-coverts dull cinnamon brown, the rest of wings intermediate between the last named color and color of back, except edges of outermost primaries, which are pale hair brown; underparts white, the fore-neck, sides of throat (submalar region), chest, and sides of breast marked with triangular spots of deep grayish brown or drab; the flanks broadly streaked or striped with the same (both sides and flanks mostly grayish brown laterally);

malar region white flecked with grayish brown; under tail-coverts grayish brown centrally, broadly margined with white or buffy white; middle of throat and breast usually with a few small spots of brown; maxilla dusky on culmen, paler on tomtia; mandible pale colored (yellowish in winter, pinkish or lilaceous in summer); iris brown; legs and feet brown" (Ridgway).]

Description.—"Similar to *P. i. unalaschensis* but much browner and more uniform in color above (back, etc., warm sepia brown instead of grayish brown or brownish gray); spots on chest, etc., larger and deeper brown; under tail coverts more strongly tipped with buff" (Ridgway). Length of adult male (skins): 6.78 (172.5); wing 3.30 (83.8); tail 2.92 (74.1); bill .50 (12.7); tarsus 1.02 (25.9).

Recognition Marks.—Sparrow size; uniform brownish coloration of back; underparts heavily spotted with brown; *browner* than *unalaschensis* but duller than *townsendi*; larger than *annectens*; color of crown unbroken as compared with Rusty Song Sparrow (*Melospiza melodia morphna*), also bird larger.

General Range.—"Kadiak Island, Alaska, in summer; in winter south along the coast slope to southern California."

Range in Washington.—Winter resident and migrant west of Cascades.

Authorities.—*Passerella townsendii* Baird, Rep. Pac. R. R. Surv. IX. 1858. p. 489 part (Whitbeys Id., winter).—*Fide* Ridgway.

A singular fatality (or, more strictly, *want* of fatality) has attended our efforts to secure a representative series of migrating Fox Sparrows on Puget Sound. The birds have only revealed themselves in city parks or otherwise in the absence of a gun. It is practically certain that all the Alaskan forms described by Mr. Ridgway occur here regularly in winter and during migrations but so unobtrusive are the birds and so dense the cover afforded that we have been completely baffled in our attempts, and find ourselves obliged, at the last moment, to fall back upon Mr. Ridgway's original descriptions in *Birds of North and Middle America*, Vol. I. (p. 389 ff), and for the use of these we desire again to express our grateful obligations.

For additional remarks on the Shumagin Fox Sparrow (*P. i. unalaschensis*) and the Yakutat Fox Sparrow (*P. i. annectens*) see Hypothetical List in Volume II. of this work.

FIELD identification of the Fox Sparrows by means of binoculars may not command the respect of precise scientists. But there he sat, placid, at twenty feet, in a well-lighted grove on the Nisqually Flats, on the 10th day of February, 1906. See; twenty divided by eight (the magnifying power of the glasses) equals two and a half. At arm's length I held him, while I noted that the upperparts were dull hair-brown throat, not noticeably brightening on wings and tail but perhaps a shade darker on the crown; underparts heavily but *clearly* spotted with a warmer brown—so, obviously and indisputably, neither a Sooty nor a Townsend. Shumagin (*P. i. unalaschensis*) perhaps; but Ridgway^a enters all Puget Sound winter records as Kadiaks, and we must follow the gleam until we are able to perfect the light of our own little lanterns by the flash of a shot-gun.

a. *Birds of North and Mid. Am.*, Vol. I., p. 391.

No. 61.

TOWNSEND'S SPARROW.

A. O. U. No. 585 a (part). *Passerella iliaca townsendi* (Audubon).

[Description of *P. i. annectens* (Yakutat Fox Sparrow).—"Similar to *P. i. insularis* but smaller (the bill especially) and coloration slightly browner" (Ridgw.).]

Description.—*Adults*: Similar to *P. i. annectens* but coloration darker and richer (inclining to chestnut brown); spots on chest, etc., larger. "Above deep vandyke brown, duller (more sooty) on pileum, more reddish (inclining to burnt umber or dark chestnut brown) on upper tail-coverts and tail; sides of head deep sooty brown, the lores dotted, the auricular region finely streaked, with dull whitish; general color of underparts white, but everywhere spotted or streaked with deep chestnut brown or vandyke brown, the spots mostly of triangular (deltoid and cuneate) form, very heavy and more or less confluent on chest, smaller on throat and breast; sides and flanks almost uniform deep brown, the latter tinged with buffy or pale tawny, under tail-coverts deep olive or olive-brown broadly margined with buffy or pale fulvous." Length of adult male (skins): 6.67 (169.4); wing 3.17 (80.5); tail 2.78 (70.6); bill .47 (11.9); tarsus 1.00 (25.4).

Recognition Marks.—Sparrow size; warm brown (nearly uniform) coloration of upperparts; heavy spotting of chest, etc. Absence of distinctive head markings will distinguish bird from local Song Sparrows, and robust form with conical beak from migrating Hermit Thrushes.

Nesting.—As next. Does not breed in Washington.

General Range.—"Coast district of southern Alaska (islands and coast of mainland from southern side of Cross Sound, Lynn Canal, etc., to north side of Dixon Entrance); in winter, south to northern California" (Ridgway).

Range in Washington.—Common migrant and (possibly) winter resident west of Cascades.

Authorities.—*Fringilla townsendi* Audubon, Orn. Biog. V. 1839, 236, pl. 424, fig. 7 (Columbia River). Townsend, Narrative (1839), p. 345. *Passerella townsendii*, Baird, Rep. Pac. R. R. Surv. IX. 1858, p. 489. C&S. Ra. Kk. B. E(11).

Specimens.—(U. of W.) Prov. B. C.

TIME was when all the various Fox Sparrows of the Pacific Northwest were lumped together under the name Townsend's Sparrow. A more critical age, however, under the leadership of Professor Ridgway, has resolved the bewildering array of shifting browns into five forms, or subspecies, assigning to each summer quarters according to the dullness or brightness of its coat. The end is not yet, of course, but the distinctions already made are sufficiently attenuated to cause the public to yawn. Suffice it to say, that this is one of the plastic species long resident on the Pacific

Coast: and that the varying conditions of rainfall and temperature, to which the birds have been subjected thruout the greater portion of the year, have given rise to five recognizable forms of the Townsend Sparrow.

Probably all forms are migratory, but the northernmost member of the group, the Shumagin Fox Sparrow (*P. i. unalascensis*) has not been taken except in its summer home, the Alaska Peninsula, Unalaska, and the Shumagins. The remaining four are known to retire in winter as far south as California; but whether they preserve the 2, 3, 4, 5, arrangement in winter, or whether the order is roughly reversed (as is true in the case of certain other species), so that number 2 goes farthest south, while number 5, less anxious as to the severities of winter, migrates, as it were, half-heartedly, and becomes for a time the northernmost form, we cannot tell. However this may be, Townsend's Sparrow proper (*P. i. townsendi*) appears to outnumber any of the remoter forms during at least the spring migrations; and because it is our next neighbor on the north, should be entitled to more consideration than plain heathen birds.

At no time does the absorptive power of our matchless Puget Sound cover appear to greater advantage than during the migration of the Fox Sparrows. However they may choose to move at night, by day they frequent the dense tangles of salal and salmon brush, or skulk about in cedar swamps. To search for them is useless, but if you are much out-of-doors the time will come, while you are footing it softly along some woodland path, that a demure brown bird will hop out in front of you and look unconcernedly for tid-bits before your very eyes. The bird is a little larger than a Song Sparrow, but you will require a second glance to note that the colors of the upperparts are smoothly blended, that the head lacks the vague stripiness of *Mclospiza*, and that the underparts are spotted instead of streaked. Or, it may be, that you chance upon him as he is busily scratching among the fallen alder leaves. Scratching is hardly the word tho, for the bird leaps forward and executes an extravagant double kick backward, landing invariably at the edge of the cleared space. Here, without a moment's delay, he proceeds to glean busily, whereas you rather expected him to pause at the end of his stunt, like the acrobat, awaiting the conventional burst of applause. If you must needs pursue the path, he hops back into the thicket and you have seen, perhaps, your last Fox Sparrow for this year, altho his migrating kinsmen must number millions.

No. 62.

SOOTY FOX SPARROW.

A. O. U. No. 585a (part). *Passerella iliaca fuliginosa* Ridgway.

Description.—*Adults*: Upperparts, sides of head, neck, and lateral underparts nearly uniform dark brown (sepia brown—"sooty" not inappropriate), warming slightly upon exposed surfaces of wings and upon rump and outer edges of rectrices; below white save for under tail-coverts, which have clear buffy wash, everywhere save on middle belly heavily marked with large, chiefly triangular, spots of the color of back or darker—spotting heaviest on breast where nearly confluent. Bill black above shading on sides into yellow of lower mandible; feet pale ruddy brown or wine-color. Length (of a single fresh specimen) 7.45 (191.7); wing (av.) 3.21 (81.5); tail 2.91 (77); bill .48 (12.2); tarsus 1.02 (25.9).

Recognition Marks.—Sparrow to Chewink size; uniform sooty brown coloration of head and upperparts; heavily spotted below with sepia or blackish; darker above and more heavily spotted below than any migrant form of the *P. i. malaschensis* group.

Nesting.—*Nest*: a bulky structure with a broad, flat brim, of mosses, grasses, twigs, woody fibers, weed-stalks, often heavily lined with fine dry grass of contrasting color and with an inner mat of fur, hair or feathers; placed at moderate heights in thickets or saplings; measures externally 6 inches across by 3 deep, internally 2½ across by 1½ deep. *Eggs*: 4, greenish blue, spotted, or spotted and clouded, with reddish brown. Av. size, .94 x .68 (23.8 x 17.3). *Season*: May-July; two broods.

General Range.—Summer resident in coast region of British Columbia and northwestern Washington; in winter south along the coast to San Francisco.

Range in Washington.—Breeding on the San Juan Islands and upon the northern and western shores of the Olympic Peninsula; not uncommon migrant on Puget Sound.

Authorities.—(?) Baird, Rep. Pac., etc., 489 part; (?) Cooper and Suckley Rep. Pac., etc., 204 part; (?) Selater Cat. Am. Birds, 1862, 119 part (Simiahmoo [sic]); Ridgway, Auk, XVI, Jan. 1899, 36 (Neah Bay). Kb. E.

Specimens.—Prov. B.N. E.

THE mystery of the Fox Sparrow clears a little as we move northward on Puget Sound, and may even resolve itself one day as we spend a lazy July in camp on one of the San Juan islands. We are puzzled, as the tent pegs are being driven, by certain sprightly songs bursting out now here, now there, from the copse. We labor under a sense of avian surveillance as we gather fuel from the beach, but the songs are too joyous and limpid to make precise connections with anything in previous experience. It is not till the cool of the evening, when we seek the spring, back in the depths of the thicket, that we come upon a fair birdmaiden slyly regaling herself upon a

luscious salmon-berry, flushed to the wine-red of perfection, while three of her suitors peal invitations to separate bowers in the neighboring tangles. She flees guiltily on detection, but the secret is out; we know now where these shy wood nymphs keep themselves in summer.

The male bird is sometimes emboldened by the moment of song to venture into the tops of willows or alders, but even here he hugs the screen of leaves and is ready in a trice to dive into the more familiar element of bushes. Once under cover of the protecting salal, or among the crowding ferns, the Fox Sparrows are excelled by none in their ability to get about with a modicum of disturbance; and the longest journeys, such as are made necessary in the time of clamoring young, appear to be made by slipping and sliding thru the maze of intersecting stems. The song is varied and vivacious; but, save for the opening notes, is neither very strong nor very brilliant. The opening phrase, however, *Pewit, heu*, comes as a tiny bugle call into which is distilled the essence of all dank hollows, of all rustling leaves, of all murmuring tides, and of all free-blowing breezes. It is the authentic voice of the little wild.

On a July day a trio of Indian boys, Quillayutes, were showing the bird-man a round of be-lated nesters, while he was looking for opportunities to photograph eggs, and also recording Quillayutan bird names in passing. A Rusty Song Sparrow's nest held only weanlings, mildly hideous,

and the leader, a lad of ten, expressed regret that he could not show me the nest of another kind of Song Sparrow. With excess of Caucasian pride I assured him that there was only one species of Song Sparrow to be found locally, but my learned statements drew forth only puzzled and unconvicted glances. Some days later when I had taken a set of Sooty Fox Sparrow's eggs from a neighboring islet, the boys clamored in triumph, "That's it;



From a Photograph Copyright, 1907, by W. L. Dawson.

CARROLL ISLET—SOUTH EXPOSURE.

WHERE THE FIRST NEST OF THE SOOTY FOX SPARROW WAS FOUND.

close for the eggs of *Vireobaculata*, the other Song Sparrow we told me about. The birds were next enough right: the Fox Sparrow is for all its ordinary world like a Song Sparrow; and I suspect that not a dozen white boys in Washington ever saw the bird itself, let alone distinguishing it by name.

The eggs were (at least) very fresh and most recently arrived, on



FIGURE 1. NESTING SITE.

PLATE II. PL. 14009

THE SCOTTY DOG SPARROW IN THE CAMP.

A large number of these birds were seen in the camp, and they were found to be very common in the vicinity.

a weight (let a mile or two out from the Pacific shore. The island is given over to the birds, and these nest upon its precipitous sides to the number of thousands, but the center of the peak is covered with a grove of spruce trees, which overshadow a dense growth of salal berry bushes. In a clump of the latter at a height of six feet was placed a very bulky but miserable incubation nest, which took, in the walls and cup which occupies the upper center of the structure, three eggs of a greenish blue color heavily spotted and mottled with wash brown. The nest measures externally eight and ten inches in width, internally two to three four inches inside and only one and a half inside. It is composed chiefly of green mosses set in

dead spruce twigs with a few twisted weed stalks; while the lining is of a light-colored, fine, dead grass, very loosely arranged, and a few breast-feathers of the Glaucous-winged Gull. A nestful of young Peregrine Falcons were conversing in screams with their doting parents in the spruce trees overhead, and terrorizing the island thereby; but the Sooty Fox Sparrows stepped forward modestly to claim ownership in the nest which "Science" unfortunately required. The date was July 21, 1906, and the eggs were nearly upon the point of hatching.

Thus, the north and west slopes of the Olympic Mountains, together with the islands of lower Puget Sound, appear to mark the southern breeding range of the coastal Fox Sparrows. This form has not been reported breeding upon the mainland east of Puget Sound, but it is difficult to see why it should not do so. It is rather the commonest form during the spring and fall migrations, and there is no evidence as yet that it tarries with us in winter.

No. 63.

SLATE-COLORED SPARROW.

A. O. U. No. 585 c. *Passerella iliaca schistacea* (Baird).

Synonym.—SLATE-COLORED FOX SPARROW.

Description.—*Adults*: Upperparts slaty gray tinged with olivaceous, changing abruptly to russet brown on upper tail-coverts, and tail; wings brown brightening, more rusty, on edges of greater coverts and secondaries; some white fleckings below eye, and supraloral spot dull whitish; underparts white shaded with color of back on sides; the sides of throat, chest, and sides of breast heavily and distinctly marked with triangular spots of sepia; lower breast (and sometimes middle of throat) flecked, and sides and flanks striped, with the same shade; under tail-coverts grayish brown centrally edged broadly with buffy. *Young birds* are tinged with brown above and are duller white below with less distinct markings. Length of adult male 7.00-7.50 (177.8-190.5); wing 3.15 (80); tail 3.15 (80); bill .47 (12); tarsus .92 (23.3).

Recognition Marks.—Sparrow to Chewink size; slaty gray and brown coloration above with heavy spotting on breast distinctive; gray instead of brown on back as compared with the five members of the *unalaschensis* group.

Nesting.—*Nest*: a bulky affair of twigs, weed-stalks, grasses, etc., placed on ground or low in bushes of thicket. *Eggs*: 3-5, usually 4, greenish brown sharply spotted or (rarely) blotched with chestnut. Av. size .85 x .65 (21.6 x 16.5). *Season*: May-July; two broods.

General Range.—Rocky Mountain district of United States and British Columbia west to and including the Cascade Mountains, the White Mountains

of southeastern California, and the mountains of northeastern California; south in winter to New Mexico, Arizona, etc.

Range in Washington.—Summer resident in the timbered districts of the East-side and in the Cascade Mountains (west to Mt. Rainier).

Authorities.—"Slate-colored sparrow," Johnson, Rep. Gov. W. T. 1884 (1885), 22]. **Bendire**, Life Hist. N. A. Birds, Vol. II., p. 435.

THE residents of Cannon Hill, in Spokane, are to be congratulated, not alone for their wealth, for Nature is not curious as to bank accounts, but for the rare good taste which has been displayed in utilizing the largess of Nature. Instead of going in with axe and shovel and fire-brand, first to obliterate the distinctive features of Nature and then rear mocking platitudes in mortar and stone upon her pale ashes, they have accepted the glory of her grim lava bastions and the grace of her unhewn pines; nor have they even despised the tangles of wild shrubbery, those decent draperies without which both tree and cliff would be over stark. To be sure the landscape artist with consummate skill has said to the piny sentinel, "Stand here!" and to the copse, "Sit there!" but he has not forgotten withal the primeval rights of the feathered aborigines. As a result *the birds approve*. What higher meed could mortal ask? Or where is there a better criterion of taste? Taken all in all I doubt if there is a more delightful spot in Washington in which to study bird life, certainly not within municipal bounds, than Cannon Hill affords.

Here, for instance, is this wood sprite, the very genius of the unravished wild; no one would think of looking for him in a city, yet of an early morning as the bird-man was passing along Seventh Avenue, he was arrested by the crisp and hearty notes of a Slate-colored Sparrow, coming from a bush in an artistically unkempt corner of the adjoining yard. In the half light, nothing in the pose and appearance of this bird would have induced an ornithologist to bestow a second glance upon the evident Song Sparrow, had it not been for the sweet and powerful challenge which poured from his earnest beak. *Oorec, rickit, loopitceer*, it said, with varied cadence and minor change, which gave evidence of no mean ability. There is something so forthright and winsome about the song of this modest bird, that the listener promptly surrenders "at discretion," and begins to ask eager questions of his dainty captor.

A few yards further on three of these Sparrows were seen feeding on a well-kept lawn, but ready to skurry at a breath to the shelter of bush-clumps, thoughtfully provided. And all this in the first week in June, the very height of nesting time! With this as an example, what need to speak of Hammond Flycatchers, Mountain Chickadees, Catbirds, Pine Siskins, Audubon Warblers, Shufeldt Juncos, Cassin Finches, Pygmy Nuthatches, American Crossbills, Cassin Vireos, Louisiana Tanagers, Ruby-crowned

Kinglets, Olive-sided Flycatchers, Evening Grosbeaks, Violet-green Swallows, Black-chinned Hummingbirds, Bobwhites, and a host of commoner sorts, all residents of the same demesne? "Unto him that hath shall be given." Unto these who have shown appreciation and consideration, has been given the friendship of the birds, and they deserve their good fortune.

On the 5th of June we visited a nest which had been located a few days before in a little aspen grove beyond Garden Springs. The nest was placed upon the ground at the base of a small tree, and it sat so high, without pretense of concealment, that it was plainly visible with all its contents two rods away.

The female was brooding, but upon our approach she slipped quietly off and left her three callow young to the tender mercies of the bird-man and his big glass eye, set at four feet, while she began searching for food upon the ground a yard or two away.



Taken in Rainier National Park.

From a Photograph Copyright, 1908, by W. L. Dawson

WITH UNCLOUDED BROW

A HAUNT OF THE SLATE-COLORED SPARROW

The male bird appeared, once, upon a bush some twenty feet away, making no hostile demonstration but beaming rather a hearty confidence, as who should say, "Well, I see you are getting along nicely at home; that's right, enjoy yourselves, and I'll finish up this bit of hoeing before supper."

The mother bird, meanwhile, was uttering no complaint of the strange presence, preferring instead to glean food industriously from under the carpet of green leaves. Soon she returned, hopping up daintily. Standing upon the elevated brim of her nest she carefully surveyed her brood without proffer of food, as tho merely to assure herself of their welfare. I "snapped" and she retreated, not hastily, as tho frightened, but quietly as matter of reasonable prudence. Again and again during the hour I had her under fire, she returned to her brood. Each time she retired before the mild roar of the curtain shutter, never hastily or nervously, but deliberately and demurely. Thrice she fed her brood, thrusting her beak, which bore no external signs of food, deep down into the upturned gullets of the three children. Thrice she attempted to brood her babes, and very handsome and very motherly she looked, with fluffed feathers and mildly inquisitive eye; but the necessary movement following an exposure sent her away for a season.

When absent she neither moped nor scolded, but discreetly set about scratching for food, always within a range of ten or fifteen feet of the nest. At such times she would look up trustfully and unabashed. Upon the return she never flew, and there was nothing to advise the waiting camerist of her approach, save the rustle of leaves as she came hop, hopping, until she stood upon the familiar brim.

The opportunities for picture-making were simply unlimited, save for the weakness of the leaf-diluted light. Seldom have I been stirred to such admiration as in the case of this gentle mother *Schistacea*. So demure, so even-tempered, and so kindly a bird-person, with such a preserving air of gentle breeding, I have not often seen. It was an hour to be long remembered.

No. 64.

GREEN-TAILED TOWHEE.

A. O. U. No. 5921. *Oreospiza chlorura* (Aud.).

Synonyms.—GREEN-TAILED FINCH. BLANDING'S FINCH.

Description.—*Adults*: Crown and occiput rich chestnut; forehead blackish gray with whitish loreal spot on each side; remaining upperparts olive-gray tinged more or less with bright olive-green; wings and tail with brighter greenish edgings; bend of wing, axillaries and under coverts yellow; chin and throat

white bordered by dusky submaxillary stripe; sides of head and neck and remaining underparts ashy gray, clearing to white on abdomen, tinged with buffy or brownish on sides, flanks and crissum. Bill blackish above, paler below; legs brown, toes darker; irides cinnamon. *Young birds* are brown above tinged with greenish and streaked with dusky but with wings and tail much as in adult. Length of adult about 7.00 (177.8); wing 3.15 (80); tail 3.30 (84); bill .50 (12.7); tarsus .94 (24).

Recognition Marks.—Sparrow size; rufous crown, white throat; greenish coloration of upperparts.

Nesting.—"Nest: in bush or on the ground. *Eggs:* .90 x .68 (22.8 x 17.2); pale greenish or grayish white, freckled all over with bright reddish brown, usually aggregating or wreathing at the larger end" (Coues).

General Range.—"Mountain districts of western United States, from more eastern Rocky Mountain ranges to coast range of California; north to central Montana and Idaho and eastern Washington" (Ridgway). South in winter to Mexico and Lower California.

Range in Washington.—Presumably summer resident in the Blue Mountains.

Authorities.—"Green-tailed towhee," Johnson, Rep. Gov. W. T. 1884 (1885, 22]. **Ridgway**, Birds of North and Middle America, Part I, 401. T(?).

NOT having ourselves encountered this species we are not able to comment on Prof. Ridgway's inclusion^a of eastern Washington in the bird's breeding range. The Green-tailed Towhee appears to be essentially a mountain-loving species, and if it occurs within our borders, will be nearly confined to the Blue Mountains of the southeastern corner.

Mr. Trippé, writing from Idaho Springs, Colorado, says of this bird^b: "It arrives at Idaho early in May, and soon becomes abundant, remaining till the close of September or early part of October. It is a sprightly, active little bird with something wren-like in its movements and appearance. It is equally at home among the loose stones and rocks of a hill-side (where it hops about with all the agility of the Rock Wren), and the densest thickets of brambles and willows in the valleys, amidst which it loves to hide. It is rather shy, and prefers to keep at a good distance from any suspicious object; and if a cat or dog approaches its nest, makes a great scolding, like the Cat-bird, and calls all the neighbors to its assistance; but if a person walks by, it steals away very quietly and remains silent till the danger is passed. It has a variety of notes which it is fond of uttering: one sounds like the mew of a kitten, but thinner and more wiry; its song is very fine, quite different from the Towhee's and vastly superior to it. It builds its nests in dense clumps of brambles, and raises two broods each season, the first being hatched about the middle of June."

a. Birds of North and Middle America, Vol. I., p. 401.

b. Coues, "Birds of the Northwest" (Ed. 1874), p. 177.

No. 65.

SPURRED TOWHEE.

A. O. U. No. 588 a. *Pipilo maculatus montanus* Swarth.**Synonyms.**—CHEWINK. "CATBERD."

Description.—*Adult male*: Head and neck all around, chest and upperparts black, glossy anteriorly, duller on back; elongated white spots on scapulars, on tips of middle and greater coverts and on outer web of exposed tertials; edge of wing white and succeeding primaries white on outer web; outermost pair of rectrices edged with white on outer web; the three outermost pairs terminally blotched with white on inner web and the fourth pair touched with same near tip; breast and belly white; sides, flanks and crissum light cinnamon rufous, bleaching on under tail-coverts to light tawny. Bill black; feet brownish; iris red. *Adult female*: Similar to male but duller; black of male replaced by slaty with an olivaceous cast. Length of adult males: 7.50-8.50 (100.5-215.9); wing 3.17 (.86); tail 3.03 (100); bill .53 (13.5); tarsus 1.07 (27.7); hind claw .48 (12.2). Female a little less.

Recognition Marks.—Standard of "Chewink" size; black, white and cinnamon-rufous unmistakable; heavily spotted with white on scapulars and wing as compared with *P. m. oregonus*.

Nesting.—*Nest*: on the ground in thicket or at base of small sapling, a bulky collection of bark-strips, pine needles, coarse dead grass, etc., carefully lined with fine dry grass; measures 5 inches in width and 3 in depth externally by 2½ wide and 1½ deep inside. *Eggs*: 3-5, usually 4, grayish white or pinkish white as to ground, heavily and uniformly dotted with light reddish brown. Av. size, .03 x .70 (23.6 x 17.81). *Season*: last week in April, last week in May and first week in June; two broods.

General Range.—Breeding in Upper Sonoran and Transition zones from the Rocky Mountains to the Cascade-Sierras and in the Pacific coast district of central California, and from Lower California and Northern Mexico north into British Columbia; retiring from northern portion of range in winter.

Range in Washington.—Common summer resident east of the Cascades, found in foothills and mountain valleys up to 3,000 feet; casually resident in winter.

Authorities.—*P. m. megalonyx*, Brewster, B. N. O. C. VII, Oct. 1892, p. 227. D? Sst, Sst, J.

Specimens.—(U. of W.) Pl. Prov. C.

ALTHO of Mexican stock, our western Towhee does not differ greatly in appearance from the familiar bird (*P. erythrophthalmus*) of the East; and its habits so closely resemble that of the eastern bird as hardly to require special description. The Spurred Towhee is a lover of green, thickety hill-sides and brushy draws, such cover, in short, as is lumped together under

the term "chaparral" further south. It is, therefore, narrowly confined to the vicinity of streams in the more open country, but it abounds along the foothills and follows up the deeper valleys of the Cascades nearly to the divide.

Tow'hee, as a name, is a manifest corruption of *to-w hee*, or *to-hwee*, an imitative word, after the bird's most familiar note. Chewink' is an attempt along the same line, but *Marié* is what the bird seems to me to say. It is on this account alone that the bird is said to "mew" and is called



SPURRED TOWHEE, MALE.

"Catbird." The true Catbird, however, always says *Ma-a ry*, and there is no cause for confusion. During excitement or alarm the Towhee's note is always shortened and sharpened to *Mric*, with a flint and jet, and a flash of the eye. The song variously rendered as "*Chee-terr, pilly, willy, willy*," "*Chip, ah, to-w-hee-ee*" and "*Yang, kit-cr-cr*," is delivered from the top of a bush or the low limb of a tree; and while monotonous and very simple, it retains the pleasing quality of that of the eastern bird. The singer will not stand for close inspection, for, as Jones says of its cousin^a: "He is a nervous fellow, emphasizing his disturbance at your intrusion with a nervous

a. Lynds Jones in Dawson's "The Birds of Ohio," p. 94.

fluff, fluff of the short wings, and a jerk and quick spreading of the long, rounded tail, as if he hoped that the flash of white at its end would startle the intruder away.



NEST AND EGGS OF THE SPURRED TOWHEE.

For a nest the Spurred Towhee scratches a hollow at the base of a bush or clump in some dry situation, and lines this carefully first with leaves, bark-strips, and plant stems, then with fine grasses or rootlets. The eggs, commonly four or five, are deposited the last week in April or first in May, and the female clings to her treasure until the crushing footstep is very imminent. Once hatched, however, she keeps in the background, scolding intermittently, and she will not return until long after the exhausted bird has died down.

Two broods are raised each season, and the first one, at least, must early learn to shift for itself. The young birds are obscure, dun-colored creatures quite unlike their parents in appearance, and by July they infest the underbrush of the more open mountain sides in such numbers and apparent variety as to sort a dozen false hopes in the ornithologist's breast each day.

No. 66.

OREGON TOWHEE.

A. O. U. No. 588 b. **Pipilo maculatus oregonus** (Bell).**Synonyms.**—"CATBIRD." CHEWINK.

Description.—*Adult male*: Similar to *P. m. montanus* but darker, the white spotting of wing and blotches on tail much reduced; two outer pairs of rectrices blotched and the third touched with white near tip; cinnamon-rufous of sides, etc., richer and deeper. *Adult female*: Like male but black veiled by deep reddish brown (clove brown) skirtings of feathers. Length about 8.50 (216); wing 3.33 (84.6); tail 3.69 (93.7); bill .57 (14.5); tarsus 1.10 (27.9); hind claw .43 (10.9). Female a little smaller.

Recognition Marks.—"Chewink" size; black (with white spotting on wings) above; white of breast; deep reddish brown of sides; mewing cry.

Nesting.—Like that of preceding species. *Eggs* a little larger: Av. size, 1.04 x .74 (26.4 x 18.8).

General Range.—Pacific coast district from British Columbia (including Vancouver Id.) south to central California; chiefly resident thruout its range.

Range in Washington.—Of general occurrence, save at higher levels, west of the Cascades; resident.

Authorities.—? *Fringilla arctica*, Aud. Orn. Biog. V. 1839, 49; pl. 394. *P. oregonus*, Bell, **Baird**, Rep. Pac. R. R. Surv. IX. 1858, pp. 513, 514. (T). C&S. L. Rh. Kb. Ra. Kk. B. E.

Specimens.—U. of W. P. Prov. B. BN. E.

PERHAPS no bird is better known by voice and less by plumage than this shy recluse of the under forest. Swampy thickets, brush-piles, log-heaps, and the edges of clearings are his special delight. Hence it is that the newcomer, taking up quarters at the edge of town, hears this mysterious, questioning voice, *me-ay ? meay uh ?* rising from the depths of the brush-plot opposite. He reports the sound under the name of "Catbird," and asks the bird-man's opinion. Or, if the newcomer has been persistent enough, he has a glowing account to give of a handsome black bird with red on its sides, "like a Robin," and some white below. The bird would only show himself for a moment at a time, and then he flitted and flirted restlessly before he dived into cover again, so that the fine points of white spotting on the wing and white tips on the outer tail feathers were lost out of account.

Of course it is the Oregon Towhee, and the half pleasant, half complaining notes will insure him notice forever after. The bird is strictly resident wherever found, and the unmistakable blackness of his plumage is due rather to the age-long endurance of rain than to any chance association with blackened logs and stumps, as might be supposed. Towhee is prince

of the underworld, not, of course, in the Mephistophelian sense, but as the undoubted aristocrat among those humble folk who skulk under dark ferns, thread marvelous mazes of interlacing sticks and stalks, explore cavernous recesses of moss-covered roots, and understand the foundations of things generally.

The handsome bird is a little impatient of the company of his own kind, his faithful spouse always excepted; but he quite appreciates the mild deference of Rusty Song Sparrows, the bustling sociability of Western Winter Wrens, or even the intermittent homage of Seattle Wrens. In winter the Fox Sparrows attach themselves to this humble itinerant court, but they are a dozen times more bashful than their chief even.

Only at mating time does Towhee throw caution to the winds. Then he mounts a sapling and drones away by the hour. The damps of ten thousand winters have reduced his song to a pitiful wheeze, but he holds forth as bravely as any of his kin, *rehéééé rehéééé*, and again, *rehéééé*. In winter the birds employ a peculiar hissing sound, *psst* or *bzzt*, not I believe, as a warning—rather as a keep-in-touch call. It was rather heartening tho to hear the full song of Towhee on the 20th of December at Blaine. Comparisons were unnecessary, and the homely trill stood out like a benediction against the dripping silence.

In feeding, Towhees resort chiefly to the ground. They are not careful to observe quiet, and one may follow their movements by the attendant rustling of leaves. Scratching for food is a favorite employment, and this they pursue not by the methodical clutch and scrape of the old hen, but by a succession of spirited backward kicks executed by both feet at once, and assisted by the wings. By this method, not only fallen seeds are laid bare but lurking insects of many sorts, which the bird swiftly devours.

No. 67.

LAZULI BUNTING.

A. O. U. No. 599. *Passerina amoena* (Say).

Synonyms. *L. lazuli* *Forster*.

Description.—*Adult male*: Head and neck all around cerulean blue; this color carried over upperparts but pure only on rump, elsewhere appearing as skirting of feathers; middle coverts broadly and greater coverts narrowly tipped with white; wings and tail otherwise black; some skirting of ochraceous on back, scapulars and tertials; lores black; chest ochraceous sharply defined from blue above but shading gradually into white of remaining underparts; sides and flanks with outcropping bluish dusky. Bill black above, pale bluish below; feet brownish dusky; iris brown. *Adult female*: Above grayish brown, the color of male

recalled by dull greenish blue of rump and upper tail-coverts and by skirtings of wing- and tail-feathers; middle and greater coverts tipped with light buffy; underparts washed with buffy, most strongly on chest and sides, fading to whitish on belly and under tail-coverts. *Young* birds resemble the female but lack the bluish-gray of rump and skirtings, and are usually more or less streaked below on chest and sides. Length of adult male: 5.25-5.50 (133.3-139.7); wing 2.87 (73); tail 2.08 (53); bill .39 (9.9); tarsus .67 (17). Female smaller.

Recognition Marks.—Warbler size; color pattern of male distinctive, female not so easy; in general distinguishable by a softness and uniformity of the grayish brown.

Nesting.—*Nest*: a loosely constructed, bulky structure made chiefly of dead grasses and strips of soft bark, with a heavy inner lining of hair; placed about three feet up in fork of weed, bush or sapling; measures, outside, $4\frac{1}{4}$ inches across by 3 in depth, inside, $2\frac{1}{2}$ wide by $1\frac{1}{2}$ deep. *Eggs*: 4, very pale blue unmarked or, rarely, dotted with reddish brown. Av. size .76 x .56 (19.3 x 14.2). *Season*: first week in June; one brood.

General Range.—Western United States from eastern border of Great Plains to the Pacific (less common on Pacific slope) north to southern British Columbia (chiefly east of the Cascades); south, in winter, to Cape St. Lucas and the Valley of Mexico.

Range in Washington.—Common summer resident east of Cascade Mountains; less common and of irregular distribution in the Puget Sound region; breeds in Cascades up to 3,000 feet.

Migrations.—*Spring*: Yakima County May 5, 1906; Chelan May 21, 1896.

Authorities.—? *Fringilla amana*, Audubon, Orn. Biog. V. 1839, 64, 230; plates 398, 424. *Cyanospiza amana* Baird, **Baird**, Rep Pac. R. R. Surv. IX. 1858, p. 505. T. C&S. D¹. Ra. D². Ss¹. Ss². J. B. E.

Specimens.—U. of W. P¹. Prov. B. E.

ONE can scarcely believe his eyes as this jewel flashes from a thicket, crosses a space of common air, and disappears again all in a trice. Either there has been some optical illusion, or Nature has grown careless to fling her turquoises about in such fashion. We must investigate. Upon arrival, somewhere about the 10th of May, and before the return of his dun-colored mate, the male Lazuli is quite conscious of his prominence in the landscape. He avoids notice and goes bounding away if closely pressed; but love soon makes him bold, and he will pursue the object of his affections into the very thicket where you stand. Then, while the female lurks timidly within, he mounts a spray and yields an outburst of music, piercing and earnest, if not too sweet. We see that his blue is deep azure, or turquoise, rather than that of the *lapis lazuli* from which he is named. The red of his breast is nearly that of the Robin's, while the pure white of the remaining underparts completes a patriotic study in red, white, and blue. The female shows something of the color pattern of her mate, with the important exception that dull brown supplants the royal blue of head and back. After all, then, they are fitted

for separate spheres: she to skulk and hide and escape the hostile eye in the discharge of her maternal duties; he to lose himself against the blue of heaven, as he sings reassuringly from a tree-top, or sends down notes of warning upon the approach of danger.

The song of the Lazuli Bunting is a rambling warble, not unlike that of the Indigo Bunting (*C. cyanea*), but somewhat less energetic. Its brief

course rises and falls in short cadences and ends with a hasty jumble of unfinished notes, as tho the singer were out of breath. Moreover, the bird does not take his task very seriously, and he does not burden the mid-day air with incessant song, as does his tireless cousin.

Somewhere in the shrubbery and tangle, whether of saplings, berry-bushes, roses, ferns, or weeds, a rather bulky nest is built about an upright fork, at a height of two or three feet from the ground. A nest observed in Yakima County was begun on the 10th of June and practically completed by the afternoon of the following day,—this altho the first egg was not laid until the 26th. "Hemp," milkweed fibers, and dried grasses were used in construction, and there was an elaborate lining of horse-hair (p—dears; what *will* they do when the automobile has fully supplanted the horse?).

Amena means pleasant, but the female amenity is anything else,

when her fancied rights of maternity are assailed. Her vocabulary is limited, to be sure, to a single note, but her repeated *chip* is expressive of all words in *dis* from distrust to distress and violent disapprobation.



LAZULI BUNTING'S NEST.

No. 68.

BLACK-HEADED GROSBEAK.

A. O. U. No. 596. *Zamelodia melanocephala* (Swains).

Description.—*Adult male*: General coloration black and tawny varied with white and yellow; head glossy black, narrowly on chin, and with irregular invasion of tawny behind; back, scapulars, wings, and tail chiefly black; middle of back with much admixture of tawny; scapulars narrowly tipped with yellowish buffy or white, two conspicuous white wing patches formed by tips of middle coverts and basal portion of primaries; touches of white on tips of greater coverts and secondaries, and on outer edge of primaries; touches of yellow (in highest plumage) bordering white of wing-coverts, etc.; terminal third of two outer pairs of rectrices white on inner webs; lining of wings and breast centrally rich lemon yellow; remaining plumage tawny, brightest on throat and chest, with admixture of black on sides of neck; nearly as bright on rump, but veiled by lighter tips of



Taken in Oregon.

Photo by Finley and Bohlman

ANTICIPATION

feathers; lightening posteriorly on remaining underparts; nearly white on under tail-coverts; bill bluish gray, darker above; feet plumbeous. *Adult female*: Like male, but tawny of underparts paler; upperparts dark olivaceous brown with admixture of white and pale tawny; head blackish with white or brownish median and superciliary stripes; wings and tail fuscous, white markings restricted, those on tail reduced or wanting; sides and flanks streaked with dusky. Length 7.75-8.50 (196.85-215.00); wing 3.9 (99); tail 3.15 (80); bill .71 (18); depth of bill at base .59 (15); tarsus .95 (24).

Recognition Marks.—Chewink size; black head and variegated plumage of male; large beak, with haunts, distinctive.

Nesting.—*Nest*: a careless but often bulky collection of twigs or weed-

stalks, lined, or not, with fine dead grasses; set loosely in branches of bush or sapling, 6 to 20 feet up. *Eggs*: 4, greenish blue, boldly spotted or blotched with reddish brown, dusky brown and lavender, most heavily about larger end. Av. size 1.00 x .68 (25.4 x 17.27). *Season*: East-side, May 20; West-side, May 25; one brood.

Authorities.—? "*Fringilla melanocephala*, Audubon, Orn. Biog. IV, 1838, 519; pl. 373 (Col. Riv.)"; Baird, 490. **Cooper and Suckley**, Rep. Pac. R. R. Surv. XII, pt. II, 1860, 206. T(?). C&S. Rh. D¹. Ra. D². Ss². J. B. E.

Specimens.—P. B. E.

THOSE who complain of our lack of song-birds should make the acquaintance of this really skilled musician. He will not often be found in the city parks, nor yet in the fir forests; but wherever there are deciduous trees, not too dense, or tall thickets of willow and alder beside some lake or sluggish stream, there will this minstrel hold forth. The Grosbeak's song is not unlike the longer lay of the Robin, but it is richer and rounder as well as more subdued. There is

about it all a lingering languor of the Southland; and if the gentle man addressed you, you would expect him to say "Sah," with a soft cadence.

The bird's carol has the rolling quality which serves to connect it with that of the eastern Rose



THE GROSBEEK'S CONCERT HALL

breasted Grosbeak, but it is sweeter, more varied, and shows, if anything, a still more strongly marked undertone of liquid harmonies.

The male Grosbeak is, moreover, an indefatigable singer, choosing for his purpose the topmost sprays of alder or cottonwood, and taking pains to give all intruders a wide berth during the concert hours. His attachment to a given locality becomes apparent only after he has been pursued from tree to tree in a wide circuit which brings up at the original station. And

yet his shyness is not inspired by caution, for he will sing upon the nest when he spells his wife at the hopeful task of incubation.

The more matter-of-fact female has no word of greeting for the stranger beyond a sharp *kimp*, a beak-clearing note, not unlike that of a chicken with a crumb in its throat. This the male repeats also, with all shades of emphasis when the home is beset, or, as a last resort, he breaks into song at close quarters,—an ample price, surely, for the fullest immunity.

It is the nest which confirms the southern origin of these gentle birds. It is a flimsy affair of twigs, grass-stems, or weed stalks carelessly interlaced, and caught in the crotch of a sapling at a height of from five to fifteen feet. The construction is so open, that the blue eggs with their dark brown and lavender spottings may be counted from below. The birds, you see, have been accustomed to a warmer climate, to a tropical range, in fact, where warmth of bedding is no object.

If found upon the nest, the brooding bird cannot think ill of you; or, if there is ground for misgiving, seeks to disarm hostility by a display of gentle confidence. Instances are of record where the sitting bird has been stroked with the hand, and a little discretion will usually insure a lasting friendship.

This species enjoys a wide range in Washington, being found from tide-water to the upper reaches of the deeper mountain valleys; but it is nowhere common enough, let alone abundant.



Taken in Oregon.

Photo by Finley and Bohman.

REALIZATION.

No. 69.

CRIMSON-HEADED TANAGER.

A. O. U. No. 697. *Piranga ludoviciana* (Wils.).**Synonyms.**—LOUISIANA TANAGER. WESTERN TANAGER.

Description.—*Adult male*: Back, wings, and tail black; middle coverts and tips of greater coverts yellow; remaining plumage rich gamboge yellow; clearest (lemon-yellow) on rump and upper tail-coverts, darkest (live-yellow to wax-yellow) on breast, changing on head and throat to bright carmine or poppy-red. The red increases both in extent and intensity with age and is always brightest anteriorly. Bill horn color; feet and legs bluish dusky; iris brown. *Adult female*: General plumage dingy olive-yellow; darker, nearly olive, above; lighter and clearer on under tail-coverts; wings and tail dusky with olivaceous wing markings as in male but yellow paler. *Young males* resemble the adult female and only gradually acquire the clearer brighter plumage of maturity. Length about 7.00 (177.8); wing 3.75 (95); tail 2.80 (71); bill .59 (15); tarsus .80 (20.5).

Recognition Marks.—Sparrow size; sedate ways; *pittic* note. Black and yellow with crimson head of male distinctive; dull olive of female not likely to be confused when size is discriminated.

Nesting.—*Nest*: of rather rough, "tropical" construction, composed of twigs, rootlets and moss, lined with horse- or cow-hair; measures externally 7 inches across by 3 in depth, internally $2\frac{3}{4}$ wide by $1\frac{1}{2}$ deep. *Eggs*: 3-5, usually 4, pale greenish blue to deep blue, dotted and spotted sparingly with lavender and dark greenish slate, sometimes in wreath about larger end; surface heavily glossed; long ovate in shape. Av. size .92 x .64 (23.3 x 16.2). *Season*: June; one brood.

General Range.—Western United States from eastern base of Rocky Mountains to Pacific Coast, northward to British Columbia and Athabasca; south in winter to Mexico and Guatemala; straggling eastward during migrations—has been several times taken in New England.

Range in Washington.—Common summer resident in timbered sections, migrant in open country of East-side.

Migrations.—*Spring*: East-side: Yakima, May 4, 1900, May 9, 1900; Chelan, May 10, 1890, May 20, 1905; West-side: Tacoma, April 27, 1900.

Authorities.—*Piranga ludoviciana* Bonap. **Baird**, Rep. Pac. R. R. Surv. IX, 1858, p. 304. T. C&S. Rh. D^r. Ra. D^r. Ss^r. Ss^r. Kk. J. B. E.

Specimens.—U. of W. P. Prov. B. E.

THIS handsome Tanager is one of the most characteristic birds of the more open forest areas of Washington, whether east or west. It is one of the three species discovered by the intrepid explorers, Lewis and Clark; and since the Lewis Woodpecker bears the name of one, and the Clark Nutcracker of the other, there was nothing for it but to call the Tanager after the region

"Louisiana," whose further reaches they were then exploring. But we are no longer a part of Louisiana, and we prefer a color-name for one of our few brilliant birds of plumage.

In the hand, the bright yellow of the male Tanager, shading into the bright crimson upon the head, would seem to assure a very conspicuous bird, but afield it is not so. Seen against the changing green of maples, pines, or fir trees, these brilliant colors are lost to any but the most attentive eye. A resplendent male does not hesitate to stand quietly upon the end of a branch and survey you until his curiosity is fully satisfied. This quiet attitude of genteel curiosity seems to be characteristic of all Tanagers. Apart from its psychological bearings, sedateness would seem to play an effective part in modifying the attractions of bright plumage.

The male birds precede the dull-colored females by several days, and at such times only may be found in companies. One windy afternoon in May, the 20th it was, while the Columbia River steamer doddered with its freight, I took a turn ashore and explored a tiny oasis of willows which lined a neighboring brook. I soon caught the *pitic* or *pititic* of newly-arrived Tanagers. Judge of my delight upon beholding, not one, but eight of these beauties, all old males, as they filed out of a willow clump, where they had evidently taken refuge for the day. A week or so later I saw Tanagers at home in the meager willow fringes of Crab Creek, in Lincoln County; and while we were in camp at Brook Lake in Douglas County, one came out thru the sage, hopping and flitting from bush to bush, to bring me friendly greetings. It was like meeting a king in a millet field.

The song of the Louisiana Tanager—pardon the lapse; habit is stronger than reason—the song of the Crimson-headed Tanager is an étude in R. "It is remotely comparable to that of the Robin, but it is more stereotyped in form, briefer, and uttered at intervals rather than continuously sustained. The notes are sharp-edged and rich in r's, while the movement of the whole, tho deliberate, is varied, and the tone cheerful"^a. I can detect no constant difference between the song of the Crimson-headed Tanager and that of the Scarlet Tanager (*P. erythromelas*), save that that of the former is oftener prefaced with the call note, thus: *Piteric where, we soor a-ary e-erie twitoor*. This song, however, is less frequently heard than that of the Scarlet Tanager, East. Its perfect rendition, moreover, argues the near presence of a demure little lady in olive, a person who looks like nobody in particular to our indiscriminating gaze, but who exerts a strange fascination over our brilliant squire. Young males of the second summer sing hopefully, but they are less often successful in love than their ruddier rivals.

It behooves the Tanager maiden to be exacting in her choice, for all

a. Applied to *P. erythromelas* in "The Birds of Ohio," p. 109, and exactly applicable here.

the help she will get out of him at best will be sympathy and song. When it comes to real work, like nest building, she must do it. He will graciously advise as to the situation, some horizontal branch of fir or pine, from six to fifty feet high, and from three to twenty feet out. He will even accompany her on her laborious trips after nesting material, cooing amiable nothings, and oozing approval at every joint,—but help her—*necaire!*

The nest is quite a substantial affair tho rather roughly put together, of fir twigs, rootlets, and moss, with a more or less heavy lining of horse- or cow-hair, and other soft substances. The four eggs of greenish blue, dotted and spotted with lavender and dark greenish slate, appear especially handsome from above, when viewed against the dark brown nest. But, as everybody knows, the red fir (*Pseudotsuga mucronata*) is a tree of moods and tenses. You may dangle with impunity from the very tips of the branches of some fir trees, while a step from the trunk is fatal in others of the same general appearance. The Tanagers are quite as apt to patronize the brittle kind.

No. 70.

ORANGE-CROWNED WARBLER.

A. O. U. No. 646. *Helminthophila celata* (Say).

Description.—*Adult male*: Above ashy olive-green, clearing and brighter on rump; crown largely ochraceous but color partly veiled by olive tips of feathers; wings and tail fuscous with some olive edging; below greenish-yellow, dingy, or vaguely streaked with blue on breast and sides. *Adult female*: Similar to male but duller, with ochraceous crown-patch restricted or wanting. *Immature*: Without ochraceous crown; more ashy above; duller below save that abdomen is white; eyelids often whitish. Length about 5.00 (127); wing 2.40 (61); tail 1.95 (49.5); bill .42 (10.7); tarsus .70 (17.8).

Recognition Marks.—Small warbler size; ochraceous ("orange") crown-patch distinctive from all except *H. c. lutescens*, which is the common bird; duller. See next (sub)species.

Nesting.—Not known to nest in Washington but may do so. As next.

General Range.—Summer resident in western British America and Alaska (save in Pacific coast district), south thru Rocky Mountain district to New Mexico; migrating across Central States and casually(?) New England, Middle Atlantic States, Pacific States, etc., to Mexico.

Range in Washington.—Probably common migrant but passing undistinguished among more abundant *lutescens*.

Authorities.—Bowles and Dawson, Auk, Vol. XXV., Oct. 1908, p. 483.

Specimens.—Bowles. Prov. P.

MOST Alaskan species, even of those which retire in winter to South Carolina, Florida, and the Antilles, may be expected to drift thru our borders sooner or later. Typical *H. celata* was first caught in the act by Mr. Bowles in May, 1907, but we have no means of knowing that the northern form is not a frequent trespasser. Kermode gives it as a common summer resident east and west of the Cascades in British Columbia, and it is not impossible that our northern Cascade records should be referred to this type.

No. 71.

LUTESCENT WARBLER.

A. O. U. No. 646a. *Helminthophila celata lutescens* Ridgway.

Description.—*Adults*.—Similar to *H. celata* but brighter. Above bright olive-green; below definitely yellow—olive-yellow, gamboge, or even canary (on under tail-coverts). *Immature*: Above plain olive-green (not ashy, as in *H. celata*); below buffy yellow tinged with olive on breast and sides. Measurements as in preceding.

Recognition Marks.—Small warbler size; perhaps the most abundant of the eight or nine "yellow" warblers of the State; ochraceous crown-patch, of course, distinctive; not so bright as the Pileolated Warblers (*W. p. pileolata* and *W. p. chrysocla*).

Nesting.—*Nest*: on the ground sunk in bed of moss, under protection of bush or weed, or in shelving bank, of coiled dry grasses, lined with finer; $1\frac{3}{4}$ inches wide by 1 inch deep inside. *Eggs*: 4, rarely 5, dull white marked with dots and a few small blotches of yellowish brown and lavender; in shape long to short ovate, rarely oval. Av. size .67 x .51 (17 x 12.9). *Season*: May 1 and June 1; two broods.

General Range.—Summer resident in Pacific Coast district from Cook Inlet to southern California, east to western ranges of Rocky Mountain System, where intergrading with *H. celata*; south in winter to western Mexico and Guatemala.

Range in Washington.—Of general occurrence thruout the lower levels; abundant in Puget Sound region.

Migrations.—*Spring*: April 3, 6, 7 (Seattle). April 24 (Chelan). March 28, 1908 (Seattle).

Authorities.—(?) Townsend, Journ. Ac. Nat. Sci. Phila., VIII., 1839, 153 part (Columbia River). **Cooper and Suckley**, Rep. Pac. R. R. Surv., XII., pt. II., 1860, 178. (T.) C&S. L¹. Rh. D¹. Kb. Ra. D². Kk. B. E.

Specimens.—U. of W. Prov. B. BN. E.

YELLOW appears to be the prevailing color among our Washington Wood Warblers; and even of those which are not frankly all over yellow,

as this one is, there are only two which do not boast a conspicuous area of this fashionable shade. And of all yellows, yellow-green, as represented by the back of this bird, is the commonest,—so common, indeed, as to merit the facetious epithet "museum color." It is all very well in the case of the male, for he comes back (to Seattle) during the first week in April, before the leaves are fully out; and he is so full of confidence at this season that he poses quite demurely among the swelling buds of alder, maple, and willow. He is proud of his full crown-patch of pale orange, contrasting as it does with the dull yellowish green of the upperparts and the bright

greenish yellow of the underparts, — and he lets you get a good view of it at twenty yards with the glasses. Besides that, he must stop now and then to vent his feelings in song. But the case of the female is almost hopeless — for the novice.

The song of the Lutescent Warbler appears to have been very largely overlooked, but it was not the bird's fault. While waiting for his tardy mate, he



A HUNGRY CHICK.
LUTESCENT WARBLER, FEMALE, AS

has rehearsed diligently from the taller bushes of the thicket, or else from some higher vantage point of maple, dogwood, or fir tree. The burden is intended for fairy ears, but he that hath ears to hear let him hear a curious vowel scale, an inspirated rattle or trill, which descends and ends in a simple warble of several notes. The trill, brief as it is, has three qualities of change which make it quite unique. At the opening the notes are full and slow, but in the instant necessary to the entire recital the pace accelerates, the pitch rises slightly, and the component notes decrease in volume, or size. At the climax the tension breaks unexpectedly in the gentle, musical cadence of the concluding phrases, whose notes much resemble certain of the Yellow Warbler's. The opening trill carries to a considerable distance, but the sweetness of the closing warble is lost to any but near listeners. The whole

No. 72.

CALAVERAS WARBLER.

A. O. U. No. 645a. *Helminthophila rubricapilla gutturalis* (Ridgw.).

Description.—*Adult male*: Head above and on sides bluish ash with a partially concealed crown-patch of bright chestnut; a whitish eye-ring; remaining upperparts bright olive-green becoming yellowish green on rump and upper tail-coverts; underparts including crissum, bright yellow, but whitening on belly; bill small, short, acute, blackish above, brownish below; feet brown. *Adult female*: Like male but somewhat duller below; ashy of head less pure, glossed with olivaceous and not so abruptly contrasting with yellow of throat; chestnut crown-patch less conspicuous or wanting. *Immature*: Olive-green of upperparts duller; head and neck grayish brown instead of ashy; below dull olive-yellow, clearing on belly and crissum. Length of male (skins) 4.05-4.75 (103-121); wing 2.35 (60); tail 1.75 (45); bill .38 (9.6); tarsus .63 (16). Female smaller.

Recognition Marks.—Smaller; bright yellow of throat (and underparts), contrasting with ashy of head, distinctive.

Nesting.—*Nest*: usually sunk well into ground or moss at base of bush-clump or rank herbage, well made of fine bark-strips and grasses, lined with finer grasses, horse-hair and, occasionally, feathers; outside, 3 in. wide by 2 in. deep; inside $1\frac{3}{4}$ wide by $1\frac{1}{4}$ deep. *Eggs*: 3-5, usually 4, dull white as to ground-color, but showing two distinct types of markings: one heavily sprinkled with fine dots of reddish brown, nearly uniform in distribution, or gathered more thickly about larger end; the other sparingly dotted, and with large blotches or "flowers" of the same pigment. Av. size .64 x .49 (16.3 x 12.5). *Season*: May 20-July 20, according to altitude; two broods. Chelan Co. July 22, 1900, 3 fresh eggs.

General Range.—The Pacific States and British Columbia south to Calaveras County, California, and east (at least) to northern Idaho; found chiefly in the higher mountains; in migrations to Lower California and western Mexico.

Range in Washington.—Summer resident on brushy slopes and in timbered valleys of the higher ranges thruout the State, and irregularly at lower levels, at least on Puget Sound (Tacoma).

Migrations.—*Spring*: Wallula, April 23, 1905; Benton County, May 4, 1907; Chelan, May 21, 1896; Tacoma, April 24, 1897. *Fall*: Last week in August (Blaine).

Authorities.—Dawson, Auk, XVIII, Oct. 1901, 463. (D¹). J. B.

Specimens.—1.

THERE is something distinct and well-bred about this demure exquisite, and the day which discovers one searching the willow tops with genteel aloofness is sure to be underscored in the note-book. The marks of the spring male are as unmistakable as they are regal: a bright yellow breast and throat contrasting with the ashy of cheeks and head, the latter shade relieved by a white eye-ring, and surmounted by a chestnut crown-patch. If you stumble upon a company of them at play among the thorn bushes,

you are seized, as like as not, with a sense of low birth, and feel like retiring in confusion lest you offend royalty.

These gentle despots are bound for the mountains; and since their realms are not prepared for them till June, they have ample leisure to discuss the fare of wayside stations. They enter the State from the South during the last week in April—Wallula, April 23d, is my earliest record; but May 21st records an unanxious company at the foot of Lake Chelan. As the season advances they take up quarters on brushy mountain sides, or in the deciduous skirts of fierce mountain torrents. Here while the female skurries about thru the buck-brush or vine-maple thickets in search of a suitable nesting site, the male mounts a fir tree and occupies himself with song.

If you are spying on this sacred function, the bird first peers down at you uneasily, then throws his head back and sings with great animation: *Choopy, choopy, choopy churr* (tr). The trill is composed of a dozen or so of large notes which the ear can easily distinguish, but which because of the vivacious utterance one cannot quite count. The pitch of the *finale* is sustained, but there is a slight decrease in volume. If forced to descend, the singer will join his mate in sharp *chips* of protest, somewhat similar to those of the Audubon Warbler, altho not quite so clear-cut or inflexible.

While the Calaveras Warbler is a bird of the mountains and lives at any height where suitable cover is afforded, it is a curious fact that it sometimes prefers the timbered lowlands of Puget Sound, and may be found in some seasons in considerable numbers about the southern prairies. Mr. Bowles has found them commonly in scrub-oak patches which border the fir groves and timbered lakes; and yet during some years they have been unaccountably absent from the entire region.

Near Tacoma this Warbler places its nest at the base of a young oak or fir tree, where the spreading branches have protected the grass and gathered weeds. The nest is sunk well into the ground or moss, and is so well concealed as to defy discovery unless the bird is flushed. When frightened from the nest the female instantly disappears, and returns only after some considerable interval. Then she approaches with the greatest caution, ready to dart away again upon the first sign of movement on the part of the intruder. The male, if he happens to be about at all, neither joins the defense nor consoles his mate in misfortune, but sets upon her furiously and drives her from bush to bush, as tho she had wilfully deserted their treasures.

At sea-level two sets of eggs are laid in a season, one fresh about May 18th, the other about June 25th. In the mountains, however, the second nesting, if indulged in at all, is thrown very late. I took a set of three fresh eggs from a carelessly constructed nest placed in the top of an elk-weed (*Echinopanax horridum*) at a height of three feet, on the 22d day of July, 1900.

No. 73.

YELLOW WARBLER.

A. O. U. No. 652. *Dendroica aestiva* (Gmel.).**Synonyms.**—SUMMER YELLOW-BIRD. SUMMER WARBLER. WILD CANARY."

Description.—*Adult male*: Forehead and fore-crown bright yellow with an orange tinge; back bright olive-green; rump greenish yellow; wings and tail blackish with greenish yellow edgings, the wing quills edged on both webs, the tail-feathers—except middle pair—almost entirely yellow on inner webs; sides of head and entire underparts golden yellow, the breast and sides heavily streaked with chestnut; bill black; feet pale. *Adult female*: Like male but duller; olive-green on back, not brighter on forehead; paler yellow below, obscurely or not at all streaked with chestnut. *Young males* resemble the adult female. *Young female* still duller; dusky yellow below. Length 4.75-5.25 (120.6-133.3); wing 2.51 (63.8); tail 1.68 (42.7); bill .40 (10.2); tarsus .73 (18.61).

Recognition Marks.—Medium size; golden yellow coloration; chestnut streaks on breast of male; after the Lutescent the commonest of the resident Warblers; chiefly confined to the banks of streams and ponds.

Nesting.—*Nest*: a compact cup of woven "hemp" and fine grasses, lined heavily with plant-down, grasses, and, occasionally, horse-hair, fastened to upright branch in rose-thickets and the like. *Eggs*: 4 or 5, white, bluish-, creamy-, or grayish-white, speckled and marked with largish spots of reddish brown, burnt umber, etc., often wreathed about the larger end. Av. size, .70 x .50 (17.8 x 12.7). *Season*: May 20-June 20; one brood.

General Range.—North America at large, except southwestern part, giving place to *D. a. rubiginosa* in extreme northwest. South in winter to Central America and northern South America. Breeds nearly thruout its North American range.

Range in Washington.—Summer resident in deciduous timber, and shrubbery lining streams, thruout the State from sea-level to 4,000 feet.

Migrations.—*Spring*: Tacoma, April 24-30; Yakima, April 30, 1900; Chelan, May 21, 1896. *Fall*: First week in September.

Authorities.—**Cooper and Suckley**, Rep. Pac. R. R. Surv., XII., pt. II., 1860, p. 181. T. C&S, L¹. Rh. D¹. Ra. D². Ss¹. Ss². Kk. J. B. E.

Specimens.—B. B.N. E. P¹.

THE Summer Warbler's gold is about as common as that of the dandelion, but its trim little form has not achieved any such distinctness in the public mind. Most people, if they take notice at all of anything so tiny, dub the birds "Wild Canaries," and are done. The name as applied to the Goldfinch may be barely tolerated, but in the case of the Warbler it is quite inappropriate, since the bird has nothing in common with the Canary except littleness and yellowness. Its bill is longer and slimmer, for it feeds exclusively on insects instead of seeds; and its pure yellow and olive-green

plumage knows no admixture, save for the tasty but inconspicuous chestnut stripes on the breast of the adult male. These stripes are lacking in males of the second year, whence Audubon was once led to elaborate a supposed new species, which he called the "Children's Warbler." The name is not ill-fitting, even tho we know that it applies only to the Warbler's children.

The Yellow Warbler is peculiarly a bird of sunshine, and is to be found chiefly in open situations. It swarms thru the orchards and gardens, frequents the wayside thickets, and in town takes possession of the shrubbery in lawn or park. It is abundant in swampy places, and is invariably present in season along the banks of streams which are lined with willows, alders, and wild rose bushes.

The song is sunny, too, and while not elaborate, makes substantial contribution to the good cheer of spring. Heard in the boskage it sounds absurdly as if some wag were shaking an attic salt-cellar on a great green salad. The notes are almost piercing, and sound better perhaps from across the river than they do in the same tree. Individual variation in song is considerable, but the high pitch and vigor of delivery are distinctive. Certain common types may be syllabized as follows: *Sweet, sweet, sweet, sweetie; tsee, tsee, tsit-a-see, tsee; wee-chee, chee, chee wee-i-u; tsu, tsu, tsu, tsu, tseeetee.* From its arrival sometime during the last week in April, until near the close of its second nesting, late in July, the bird may be found singing thruout the sunlit hours.

The date of this bird's annual advent in Washington is far less nearly



Taken in Oregon.

Photo by Finley and Bohlman.

A CONTENTED BABY

fixed than in the East. April 10th is my earliest date, recorded in Yakima County, but Dr. Cooper once saw large numbers (possibly *D. a. rubiginosa*) "at the Straits of De Fuca," on April 8. On the west side of the mountains this Warbler may not often nest more than once in a season, but on the East-side it usually raises two broods.

The nest of the Yellow Warbler is quite common, especially easterly, where its cover is more restricted; and no special pains is taken at concealment. Nests may be placed at any height in orchard trees, alders, willows, or even fir saplings; but, without doubt, the most acceptable site is that afforded by dense thickets of the wild rose (*Rosa pisocarpa*) where

The cradle of this bird is of exquisite fabrication. The tough inner bark of certain weeds called indiscriminately "hemp" — together with grasses and other fibrous materials in various proportions, is woven into a compact cup around, or settled into, some stout horizontal or ascending fork of bush or tree. As a result the bushes are full of Warblers' nests

one or more seasons old. A fleecy lining, or mat, of plant-down is a more less conspicuous feature of every nest. Upon this as a background a scanty horse-hair lining may exhibit every one of its strands; or again, as in the case of a nest taken on the Chelan River, the eggs themselves may be thrown into high relief by a coiled black mattress.



YELLOW WARBLER'S NEST

The male Yellow is very domestic in his tastes, insomuch that, quite unlike other Warblers, he will often venture to sing from the very bush in which his mate is sitting. Unless well accustomed to the presence of humans, the female will not sit patiently under the threat of close approach. She slips off quickly and her vigorous complaints serve to summon her husband, when both flit about close to the intruder, and scold roundly in fierce, accusing notes, which yet have a baby lisp about them.

No. 74.

MYRTLE WARBLER.

A. O. U. No. 655. **Dendroica coronata** (Linn.).

Synonym.—YELLOW-RUMPED WARBLER.

Description.—*Adult male in spring:* Above slaty blue with black streaks, smaller on sides of crown and nape, broader on back; below white, with black on upper breast, sides of middle breast, and sides in endless variety of patterns; a large patch on each side of breast, a partially concealed patch in center of crown, and rump, bright yellow (lemon or canary); superciliary line white; a deep black patch on side of head; wings fuscous; tail darker; middle and greater coverts narrowly tipped with white, forming two rather conspicuous bars; three outer pairs of tail-feathers with white blotches on inner webs, decreasing centrally; bill black; feet dark. *Female in spring, and both sexes in fall:* Duller; the blue of upperparts overlaid with brownish; a brownish wash on sides of breast and flanks; black of breast obscure,—restricted to centers of feathers; yellow of breast-spots pale or wanting. *Immature:* Brownish above; whitish below with a few obscure dusky streaks. Length 5.25-5.75 (133.3-146.1); av. of five males: wing 2.98 (75.7); tail 2.22 (56.4); bill .38 (9.7); tarsus .78 (20).

Recognition Marks.—Larger; *white* throat as distinguished from *D. auduboni*, which it otherwise closely resembles.

Nesting.—Not known to breed in Washington. *Nest* as in next species. *Eggs* indistinguishable.

General Range.—"Eastern North America chiefly, straggling more or less commonly to the Pacific; breeds from the northern United States northward, and winters from southern New England and the Ohio Valley southward to the West Indies, and through Mexico to Panama" (A. O. U. '95). "An abundant summer resident on Vancouver Island and mainland (B. C.), chiefly west of Cascades" (Kermode).

Range in Washington.—Spring and fall migrant, probably of regular occurrence east and west of the Cascades.

Migrations.—*Spring:* Tacoma, Apr. 27, 1906, 1907; Seattle, May 3, 1908; Chelan, May 22, 1905; Yakima, Apr. 30, 1891.

Authorities.—Baird, Rep. Pac. R. R. Surv. IX. pt. II., 1858, 272, 273. C&S. Rh. Ra. D². Kk. B. E.

Specimens.—U. of W. Prov. C.

WHILE only a little less lovely than its local kinsman, the Audubon Warbler, by as much as it has four patches of gold instead of five, this beautiful migrant appears to have been very largely lost to sight in the throng of its more brilliant relatives. Rathbun, writing from Seattle, says of it: "A regular and not uncommon spring migrant, associating with *D. auduboni*. Have no fall record." Bowles from Tacoma says: "An irregular fall migrant, very numerous some years, the fall of 1905 for example. Have never seen it in spring." Yakima, April 30, 1891; Chelan, May 22, 1905; Tacoma, April 27, 1907, are some of my own records. Fannin gives the species as "An abundant summer resident, chiefly west of the Cascades," in British Columbia, and it should occur regularly within our borders during migration.

The *chip* note of the Myrtle Warbler is indistinguishable from that of *D. auduboni*, but a single glimpse of the white throat is sufficient to establish identity. Those seen have necessarily been at close quarters and ranging low, in willow thickets, along the margins of ponds, etc., but it is altogether possible for a migrant troop to hold to the tree-tops in passing and so elude observation from "Forty-nine" to the Columbia.

No. 75.

AUDUBON'S WARBLER.

A. O. U. No. 656. *Dendroica auduboni* (TOWNS.)

Synonym.—WESTERN YELLOW-RUMPED WARBLER.

Description.—*Adult male*: Similar to *D. coronata* but throat rich gamboge yellow; auriculars bluish gray instead of black; a large white wing patch formed by tips of middle and outer edges of greater coverts; tail with white blotches on inner webs of four or five outer feathers; usually more extensively black on breast. *Adult female*: Similar to adult male but duller (differences closely corresponding with those in *D. coronata*); the white of wing patch nearly obsolete; the yellow of throat paler and often, especially on chin, more or less displaced by white (young females even of the second summer are sometimes absolutely without yellow on throat but the more abundant white on rectrices is distinctive as compared with *D. coronata*). Seasonal changes follow very closely those of *D. coronata* but yellow of throat is usually retained in winter save in young females and (occasionally) young males. Length of adult about 5.50 (139.7); wing 3.00 (76); tail 2.45 (57); bill .41 (10.4); tarsus .80 (20.3).

Recognition Marks.—Warbler size; five spots of yellow; extensive white blotching of tail; yellow rump distinctive in any plumage save as compared with *D. coronata*, from which it is further distinguished (usually) by yellow or yellowish of throat (If this character fails, the more extensive white on tail will always hold).

Nesting.—*Nest*: a well built, bulky structure of fir twigs, weed stems,

AUDUBON WARBLER

MALE AND FEMALE

FROM A WATERCOLOR SKETCH BY ALLAN BROWN





rootlets, etc., heavily lined with horse-hair and feathers; placed usually on branch of conifer from four to fifty feet up, sometimes in small tree close against trunk, measures 4 inches in width outside by $2\frac{3}{4}$ in depth; inside 2 by $1\frac{1}{2}$. Eggs: 3-5, usually 4, dull greenish white sparingly dotted with blackish or handsomely ringed, spotted and blotched with reddish brown, black and lavender. Av. size, .71 x .54 (18 x 13.7). Season: April-June; two broods. Tacoma, April 9, 1905, 4 eggs half incubated.

General Range.—Western North America, north to British Columbia, east to western border of the Great Plains, breeding thruout its range (in higher coniferous forests of California, northern Arizona, etc.), wintering in lower valleys and southward thruout Mexico. Accidental in Massachusetts and in Pennsylvania.

Range in Washington.—Common resident and migrant on West-side from tidewater to limit of trees; less common migrant and rare winter resident (?) east of the Cascades.

Migrations.—Spring: East-side: Yakima, March 11, 1900 (probably winter resident); Yakima, April 13, 1900; Chelan, April 20-24, 1896. West-side: Tacoma, April 24, 1906.

Authorities.—*Sylvia auduboni Townsend*, Journ. Ac. Nat. Sci. Phila. VII. 1837, 191 ("forests of the Columbia River"). C&S. L¹. Rh. D¹. Kb. Ra. D². Kk. B. E.

Specimens.—U. of W. P¹ Prov. B. BN. E.

AS one considers the Thrushes, Wrens, and Sparrows of our northern clime, he is apt to grumble a little at the niggardliness of Mother Nature in the matter of providing party clothes. The dark mood is instantly dispelled, however, at the sight of this vision of loveliness. Black, white, and gray-blue make a very tasty mixture in themselves, as the Black-throated Gray Warbler can testify, but when to these is added the splendor of five golden garnishes, crown, gorget, epaulets, and cullet, you have a costume which Pan must notice. And for all he is so bedecked, *auduboni* is neither proud nor vain,—properly modest and companionable withal.

Westerly, at least, he is among the first voices of springtime, and by the roth of March, while all other Warblers are still skulking silently in the Southland, this brave spirit is making the fir groves echo to his melody. The song is brief and its theme nearly invariable, as is the case with most Warblers; but there is about it a joyous, racy quality, which flicks the admiration and calls time on Spring. The singer posts in a high fir tree, that all may hear, and the notes pour out rapidly, crowding close upon each other, till the whole company is lost in a cloud of spray at the end of the ditty. At close quarters, the "filling" is exquisite, but if one is a little way removed, where he catches only the crests of the sound waves, it is natural to call the effort a trill. At a good distance it is even comparable to the pure, monotonous tinkling of Junco.

I once heard these two dissimilar birds in a song contest. The Warbler stood upon a favorite perch of his, a spindling, solitary fir some hundred feet

in height, while the Junco held a station even higher on the tip of another fir a block away. Here they had it back and forth, with honors surprisingly even, until both were tired, whereupon (and not till then) an Oregon Towhee ventured to bring forth his prosy rattle. It was like Sambo and his "bones" after an opera.

The range of Audubon's Warbler is about coextensive with that of ever-green timber in Washington. It does not, however, frequent all the more open pine woods of the lower foot-hills in the eastern part of the State, nor does it occur habitually in the deeper solitudes of the western forests. Considered altitudinally, its range extends from sea-level to timber-line. And altho it is at home in the highest mountains, it is equally so in the city park and in the shade trees about the house. Under such varied conditions, therefore, its habits must vary widely.

We do not know to what extent it is resident, that is, present the year around, but believe that it is quite extensively so. One may be in the woods for a dull week in January, and see never a Warbler; but on a bright day in the same region he may encounter numbers of them. I have seen them playing about the dense firs on Semiahmoo Point (Lat. 49°) on Christmas Day, and I feel sure that large numbers of them spend the winter in the tree-tops, possibly moping, after the well known fashion of the Sooty Grouse.

It is these winter residents which become active in early spring. In the vicinity of Tacoma, where they have been studied most carefully, it is found that April is the typical nesting month, and one at least of the four eggs of a nest found April 9th, 1905, must have been deposited in *March*. Along about the 25th of April great numbers of Audubons arrive from the South, and one may see indolent companies of them lounging thru the trees, while resident birds are busy feeding young. These migrants may be destined for our own mountains as well as British Columbia. East-side birds are likewise tardy in arrival, for pine trees are inadequate shelter for wintry experiments.

The absorbing duty of springtime is nesting, and to this art the Audubons give themselves with becoming ardor. The female does the work, while the male cheers her with song, and not infrequently trails about after her, useless but sympathetic. Into a certain tidy grove near Tacoma the bird-man entered one crisp morning in April. The trees stood about like decorous candlesticks, but the place hummed with Kinglets and clattered with Juncos and Audubons. One Audubon, a female, advertised her business to all comers. I saw her, upon the ground, wrestling with a large white chicken-feather, and sputtering excitedly between tussles. The feather was evidently too big or too stiff or too wet for her proper taste; but finally she flew away across the grove with it, chirping merrily. And since she repeated her precise course three times, it was an easy matter to trace her some fifteen rods straight to her nest, forty feet up on an ascending fir branch.

When the nest was presumed to be ripe, I ascended. It was found settled into the foliage and steadied by diverging twigs at a point some six or seven feet out along the limb. None of the branches in the vicinity were individually safe, but by dint of standing on one, sitting on another, and clinging to a third, I made an equitable distribution of avoirdupois and grasped the treasure. Perhaps in justice the supporting branches should have broken just here, but how could you enjoy the rare beauty of this handsome structure unless we brought it to you?

The nest is deeply cup-shaped, with a brim slightly turned in, composed externally of fir twigs, weed-tops, flower-pedicels, rootlets, catkins, etc., while the interior is heavily lined with feathers which in turn are bound and held in place by an innermost lining of horse-hairs. One feather was left to curl daintily over the edge, and so partially conceal the eggs,—four spotted beauties.

These Warblers are connoisseurs in feathers, and if one

had all their nests submitted to him, he could make a rough assignment of locality for each according to whether feathers of Oregon Ruffed Grouse, Franklin Grouse, Ptarmigan, or domestic fowls were used.

In the wet region the birds appear to nest in fir trees only, and they are as likely to use the lowermost limb as any. There is little attempt at concealment, and Bowles reports a nest only ten feet high over a path used daily by hundreds of people in Tacoma. On the dry side of the mountains the Warblers avail themselves freely of deciduous trees and bushes for nesting sites. A nest on Cannon Hill in Spokane was placed at the lowermost available crotch of a young elm tree near the sidewalk and not ten feet up—as bold as a Robin!



Taken in Tacoma.

Photo by the Author.

NEST AND EGGS OF AUDUBON WARBLER.

According to Mr. Bowles, Audubon Warblers evince a great fondness for their chosen nesting haunts, and will return to them year after year, often to the same tree, and sometimes to the same branch. "They are the most solicitous of all the Washington Warblers concerning their eggs, sometimes coming to meet the intruder as he climbs toward the nest. At such times the alarm note of the female soon brings the male, when, should the nest contain incubated eggs or young, both birds crawl among the branches, frequently within reach, with wings and tail spread, in absolute forgetfulness of their own safety."

Incubation is accomplished in twelve days; and one or two broods are raised, according to locality and length of season.

We lose sight of most of the birds, especially the smaller ones, after the heyday of springtime, but here is one who, because he has forsworn wandering, is making delicate overtures of confidence toward mankind. This year, especially, now that the dense tract of woods north of the University has been cut out, they linger about our neighborhood with the matter-of-factness of Bluebirds. The young ones play about the eaves or make sallies at passing flies from the window-sills, and yawn with childish insouciance if mamma suggests, by a sharp *tchip*, that enemies may lurk behind the curtains. They know it's only habit with her, and she doesn't believe it herself. The adult attire is duller now, and only the yellow rump-patch remains for recognition by a friend. The year is waning, no doubt of that, but October sunshine is good enough for us—or November rains. Let them flit who will! Washington is good enough for us, you in your fir house and I in mine.

No. 76.

BLACK-THROATED GRAY WARBLER.

A. O. U. No. 665. *Dendroica nigrescens* (Towns.).

Description.—*Adult male in spring and summer:* A supraloral spot of yellow; remaining plumage black, white and blue-gray; head, throat and chest black interrupted by superciliary stripes and broad malar stripes of white; remaining upperparts blue-gray, marked with black in inverted wedge-shaped spots on back, scapulars and upper tail-coverts; wings and tail black edged with bluish ash, the middle and greater coverts tipped with white, forming two conspicuous wing-bars, the four outer rectrices blotched with white on inner webs in sharply decreasing area, the outermost chiefly white, the fourth merely touched; sides white streaked with black or striped black-and-white; remaining underparts white. *Adult female:* Like male but duller, the black of crown partly veiled by blue-gray skirting, that of throat reduced by white tips of feathers. *Young birds* resemble the female but the black of crown and throat is almost entirely hidden by blue-gray and white respectively, and the area of the tail blotches is much reduced. Length about 5.00 (127); wing 2.44 (62); tail 1.97 (50); bill .36 (9.2); tarsus .60 (17.5).

Recognition Marks.—Warbler size; black and white and blue-gray coloration distinctive.

Nesting.—*Nest*: a rather loosely built structure of dead grasses, silky plant fibers, moss, etc., placed midway on horizontal limb of conifer 25-50 feet from ground; measures, externally, 3 inches wide by 2 deep, internally $1\frac{3}{4}$ wide by 1 deep. *Eggs*: 4, creamy white, marked, chiefly about the larger end with spots and small blotches of varying shades of brown, lavender and black. Av. size, .83 x .63 (21 x 16). *Season*: last week in May and first week in June; one brood.



BLACK-THROATED GRAY WARBLERS, MALE AND FEMALE.

General Range.—Western United States (north to Colorado, Utah and Washington), and British Columbia west of the Cascades; breeding southward to Southern California, southern Arizona and Lower California; south in winter thru Mexico and States of Oaxaca and Vera Cruz.

Range in Washington.—Summer resident and migrant west of the Cascade Mountains.

Migrations.—*Spring*: Seattle-Tacoma c. April 12. *Fall*: c. Sept. 1 (Blaine).

Authorities.—*Sylvia nigrescens* Townsend, Journ. Ac. Nat. Sci. Phila. VII. 1837, 191 ("forests of the Columbia River"). C&S. L. I. D¹ (?). Ra. Kk. B. E.

Specimens.—U. of W. Prov. B. E.

BLACK and white and gray are sober colors in themselves, but a skillful arrangement of all three has produced a handsome bird, and one whose dainty dignity requires no meretricious display of gaudy reds and yellows. Warblers are such tiny creatures at best that Nature has given little thought to their protective coloration. This plain-colored bird does not, therefore, shun the greenery of fir and fern, and yet we feel a peculiar fitness when he chooses for a song station some bare dead limb, gray and sober like himself.

Last year the first arrival in Seattle seated himself upon a projecting limb of a dead cedar which commanded the quiet sylvan depths of Cowan Park, and left him fairly abreast of the Fifteenth Avenue viaduct. Here he divided his time between song and enjoyment of the scene, sparing a friendly glance now and then for the admiring bird-man. His manner was complaisant and self-contained, and I felt that his little vocal offerings were a tribute to the perfect morning rather than a bid for applause.

The song of the Black-throated Gray is quite unpretentious, as Mrs. Bailey says, "a simple warbler lay, *zee-ee-zee-ee, ze, ze, ze*, with the quiet



Taken near Blaine. Photo (retouched) by the Author.
"UPON THE OVERHANGING LIMB OF AN
APPLE TREE."

woody quality of *cirens* and *carulescens*, so soothing to the ear." It is this droning, woody quality alone which must guide the ear of a listener in a forest, which may be resounding at the same time to the notes of the Hermit, Townsend, Audubon, Lutescent, and Toltmie Warblers. Occasionally even this fails. An early song which came from a young male feeding patiently among the catkins of some tall, fresh-budding alders, had some of the airy qualities of the King-

let's notes, "*Deo deopli, du du du, deo deo pli, deo deo pli, deo deo pli*"—a mere fairy sibilation too fine for mortal ears to analyze. Another said boldly, "*Heo flidgity; heo flidgity*," and "*Heo flidgity, chu wéo*."

This Warbler is of rather irregular distribution in the western part of the State, where alone it is found. A preference is shown for rather open woodland or dense undergrowth with wooded intervals. The fir-dotted prairies of the Steilacoom area are approved, and the oak groves have their patronage. During the August migration I have found the bird almost abundant at Blaine. They are curious, too, and by judicious sereeping I succeeded in calling the bird of the accompanying illustration down within five feet upon the overhanging limb of an apple tree.

Of their nesting Mr. Bowles says: "In Washington these Warblers are strictly confined to the large coniferous timber of the prairie country, during the breeding season placing their nests midway out on a fir limb, at from 25 to 50 feet above the ground. Strangely enough, however, in Oregon they almost always nest low down in the deciduous trees, sometimes only three or four feet up in a bush. In Washington the nests are always placed directly on a limb, while in Oregon my brother, Mr. C. W. Bowles, found them mostly in upright crotches.

"The nest is rather a loosely-built little structure, measuring externally three inches wide by two inches deep, internally one and three-quarters inches wide by one deep. It is composed of dead grass, silky plant fibers, moss, etc., with an amplifying lining of different kinds of hair and feathers:—a pretty little nest, tho scarcely as artistic as that of the Audubon Warbler.

"The eggs are laid during the last week in May and the first week in June, and are invariably four in number. They are creamy white in color, marked chiefly around the larger end, with spots and small



Taken in Tacoma.

Photo by J. H.

NEST AND EGGS OF THE BLACK-THROATED GRAY WARBLER

blotches of varying shades of brown, lavender, and black. Eggs in my collection from Washington average .83 x .63 inches in dimensions, while eggs from Oregon average .67 x .50 inches, the largest egg from Oregon being smaller than the smallest Washington egg. In shape the eggs vary from long to short ovate, and only one set is laid in a season.

"The parent birds are very shy in the vicinity of the nest, the female leaving at the first sign of danger and keeping out of sight.

"In Oregon, my brother noted that the male often accompanied the female while she was collecting building material, continuously scolding, but never assisting her in any way. In that section the nests were greatly preyed upon by that prince of egg-robbers, the California Jay."

No. 77.

TOWNSEND'S WARBLER.

A. O. U. No. 668. *Dendroica townsendi* (Townsend).

Description.—*Adult male*: Pileum, hindneck, lores and auriculars, chin, throat and upper chest black; supraloral region continuous with broad superciliary, a spot under eye and a malar stripe broadening behind (and nearly meeting end of superciliary on side of neck) yellow, breast yellow heavily streaked on sides with black, the black streaks thickening and merging with black of chest in front, scattering on flanks and reappearing on under tail-coverts; upper sides and flanks and remaining underparts posteriorly white as to ground; back, scapulars and rump yellowish olive-green streaked with black shading into black of head on hindneck; upper tail-coverts abruptly bluish gray; wings and tail blackish with some edgings of light gray; two white wing-bars formed by tips of middle and greater coverts; three outer pairs of tail feathers blotched with white on inner webs in descending ratio. Bill black with paler tomia; feet and legs brown; iris brown. *Adult male in fall and winter*: Areas and intensity of black much reduced, pileum and hindneck with much skirting of olive green thru which black appears mesially on feathers; auriculars entirely concealed by olive green feather-tips; black of chin and throat nearly concealed by yellow and streaks of sides reduced; black streaks of upperparts more or less concealed; upper tail-coverts color of back. *Adult female*: Very similar in coloration to adult male in fall; throat often more or less black, pileum sometimes more extensively black but black streaking of upperparts still further reduced. *Young birds in first autumnal plumage* have no clear black, and the yellow of throat and underparts is paler. Length about 5.00 (127); wing 2.64 (67); tail 1.97 (50); bill .34 (8.6); tarsus .74 (18.8).

Recognition Marks.—Warbler size; black on crown, cheeks and throat in high plumage; in low plumage extensively yellow on sides of head enclosing area of darker (olive-green)—yellow of throat combined with this character may afford clew to identification of winter specimens.

Nesting.—*Nest*: a well built, bulky but rather shallow structure, chiefly of cedar bark with a few slender fir twigs interwoven; lined with stems of moss flowers; placed at moderate heights in young fir trees well out on limb or settled against trunk. *Eggs*: 4, white, wreathed and speckled with brownish and lilac. Av. size, .61 x .51 (15.5 x 12.9). *Season*: first week in June; one brood.

General Range.—Western North America breeding from the mountains of southern California north to Alaska and east to Idaho; during migrations eastward to Rocky Mountains and southward to Guatemala, Lower California, etc.

Range in Washington.—Not uncommon spring and fall migrant on both sides of the Cascade Mountains, summer resident in coniferous timber, probably thruout the State; partially resident in winter on Puget Sound.

Migrations.—*Spring*: Seattle April 20, 1907; Ahtanum (Yakima Co.) May 4, 1906; June 1, 1906; Chinook May 25, 1905. *Fall*: Snygg, Puyallup, Seattle Dec. 31, 1905; Tacoma Dec. 4, 13, 15, 21 and 29, 1906.



TOWNSEND WARBLERS, MALE AND FEMALE.

Authorities.—*Sylvia townsendi* "(Nuttall)," Townsend, Journ. Ac. Nat. Sci. Phila. VII. pt. II. 1837, 191 ("forests of the Columbia River"). C&S. Rh. Ra. D². B. E.

Specimens.—U. of W. Prov. C. E.

WHAT a morning that was at the old parsonage in the Altatum valley, when the shade trees of the five acre enclosure were lit up by the presence of a dozen of these fairies! Waste acres of sage lay around, or fields of alfalfa and growing wheat, hardly more inviting, but the eye of the leader, winging languidly from the South, at early dawn had spied a patch of woodsy green and had ordered a halt for the day in our comfortable-looking box-elders and insect-harboring apple trees. To be sure it was absurdly late for migrants, June 5th, but they appeared more like an embassy of foreign grandees, who deigned to make requisition upon our hospitality, than mere birds with threats of family cares ahead. So while they sought breakfasts of aphid and early worm, or disported among the branches in the growing sunshine, I attended their movements in rustic wonder. Now and then a member of the party paused to adjust his golden trappings, or to settle the black head-piece with a dainty shake. It was, indeed, a notable occasion for the bird-man, inasmuch as these dandies were in "higher" plumage than any yet recognized by the best bird-books of the day,^a in that the shining black, supposedly confined to the lower throat, now occupied the very chin as well.

There was a little conversational lipping in a foreign tongue, in which the ladies of the party were included; and after breakfast the males ventured song.

Seventy-eight days later, viz., on the 23d of August, a southward bound party visited our orchard. The males were still in song, and it was difficult to believe that all the joys and sorrows of wedlock and child-rearing had intervened; yet such was probably the case.

A bird sighted at Chelan on the 25th day of May, 1905, haunted a pine and a balm tree at the foot of the Lake, singing constantly. The song ran, *dzeeee, dzeeee, dzeeee, dzeeee, dzweeetsee*, the first four notes drowsy and drawling, the fourth prolonged, and the remainder somewhat furry and squeaky. The bird hunted patiently thru the long needles of the pine, under what would seem to an observer great difficulties. Once he espied an especially desirable tidbit on the under side of a needle-beset branch. The bird leaned over and peered beneath, until he quite lost his balance and turned a somersault in the air. But he returned to the charge again and again, now creeping cautiously around to the under side, now clinging to the pine needles themselves and again fluttering bravely in the midst, until he succeeded in exhausting the little pocket of provender, whatever it was.

In June, 1906, we found these birds in the valley of the Stehekin, and

^a Coues' Key to N. A. Birds, Fourth Edition, is especially referred to. The matter has been corrected in the Fifth Edition.

again in the valley of the Cascade River, near Marblemount, breeding, undoubtedly, in both places. Here we allowed the notes, *oozi*, *wooozi lêooli* to pass for some time, unchallenged, as those of the Hermit Warbler, but finally caught a *townsendi* in the act at fifteen feet. There is, to be sure, a lisping, drawling, obstructed quality in the opening notes not found in the typical Hermit song, and possibly not at all, but the lilt at the end, *lêooli*, is inseparable from the Hermit Warbler, and I do not take it kindly of *townsendi* to mix up the game so.

Upon returning to the valley of the Stehekin in June, 1908, Mr. Bowles found the Townsend Warbler a not uncommon breeder. On the 20th of that month he discovered two nests, each containing four newly hatched young. Both were placed about twelve feet up in young fir trees, one about five feet out on a limb, the other close against the main trunk. In each instance the brooding female allowed a close approach; then dropped straight to the ground and disappeared. The birds were extremely shy at first but after an hour or so became sufficiently accustomed to the human presence to return to their duties within a few minutes after being flushed. But repeated visits failed to discover the males in the vicinity of their nests, and, indeed, they seemed to be wholly occupied with minstrelsy in the tree-tops.

On the 31st of December, 1905, I saw a Townsend Warbler in the pale winter plumage in Madrona Park, on the border of Lake Washington. He was with a group of Audubon Warblers feeding in the alders, but attention was instantly attracted to the *tsip* note, which was sharper and more clear-cut than that of the Audubon; and it had, moreover, a sort of double quality, or central turn, *tsiip* or *chiip*. This record of winter residence was further confirmed by specimens taken at Tacoma by Mr. Bowles the following December

No. 78.

HERMIT WARBLER.

A. O. U. No. 669. *Dendroica occidentalis* (Townsend).

Synonym.—WESTERN WARBLER.

Description.—*Adult male in breeding plumage:* Forehead, crown and sides of head and neck, broadly, rich lemon yellow, sharply defined below by black of clin, throat and upper chest, less sharply above by black of occiput or hind-neck; this in turn shading thru mingled olive and black into gray of remaining upperparts; upper plumage more or less tinged with olive-green and streaked more or less broadly with black; wings and tail black with grayish edgings; middle and greater coverts tipped with white forming two conspicuous wing-bars,—outermost part of tail-feathers chiefly white on both webs, next pair white on terminal half of inner web and third pair marked with longitudinal spot near tip; black of chest with convex posterior outline sharply defined from white of remaining underparts. Bill black; legs and feet dark brown; iris brown. *Adult*

male in fall and winter: Yellow of crown veiled by olive green; black of throat veiled by whitish tips; black streaking of upperparts less conspicuous. *Adult female in spring:* Like male in spring but duller, yellow of head less extensive, gray of upperparts dominating; black streaks reduced or obsolete; black of throat, etc., absent, white or dull yellowish instead; sometimes dusky spot of various proportions on chest. *Young birds* like adult female but yellow of crown veiled by olive and sides washed with brownish. Length of adult about 4.90 (124.4); wing 2.65 (67.3); tail 2.20 (55.9); bill .40 (10.2); tarsus .44 (11.3).

Recognition Marks.—Smaller Warbler size; yellow mask of male outlined against black of throat and hind neck distinctive—female and young more difficult but distinctive pattern of mask with white wing-bars usually suggestive.

Nesting.—*Nest:* saddled on horizontal branch of fir tree at a good height; a compact structure of fir twigs, mosses and vegetable down, lined with fine grass and horse-hair; measures, outside, 4 wide by 2 $\frac{3}{4}$ deep, inside, 2 wide by 1 $\frac{1}{2}$ deep. *Eggs:* 4 or 5, dull white heavily blotched and spotted with various shades of red-brown and lavender. Av. size, .36 x .53 (17.5 x 13.5). *Season:* c. June 1; one brood.

General Range.—Pacific coast district and Cascade-Sierra system with its outliers north to British Columbia; "in winter south into Lower California and through Arizona over Mexican plateau to highlands of Guatemala."

Range in Washington.—Not common summer resident, in heavier coniferous timber only.

Authorities.—*Sylvia occidentalis Townsend*, Journ. Ac. Nat. Sci. Phila. VII, 1837, 190 ("forests of the Columbia River"). C&S. L., D., B.

Specimens.—C.

THERE is a piece of woodland south of Tacoma which we call the Hermit Woods, because here on any May day may be heard the voice of this exalted Warbler. The proper hour in which to approach this forest is early morning, before the winds have begun to stir in its dim aisles, and while the hush of its nightly peace is upon everything—save the birds. The soft moss muffles the footsteps, so that the devotee may move about unheralded from shrine to shrine, as he pays silent homage to each, in turn, of those morning stars of song, the Wood Warblers. There is Audubon with his hastening melody of gladness. There is Black-throated Gray with his still drowsy sonnet of sweet content. Then there is Hermit hidden aloft in the shapeless greenery of the under-dawn,—his note is sweetest, gladdest, most seraphic of them all, *Lilly, lilly, lilly, lè o lect*. It is almost sacrilege to give it form—besides it is so hopeless. The preparatory notes are like the tinkle of crystal bells and when our attention is focused, lo! the wonder happens,—the exquisite lilt of the closing phrase, *lè-o-lect*.

In broad daylight it is the same. The singers remain in the tree-tops and tease the imagination with thoughts of a domestic life lived upon a higher plane than that of earth, an exalted state where all is beatific and serene. And try you never so hard, with glasses of a high power, it is a good hour's work to obtain a satisfactory sight of one of the uplifted creatures

In despair, one day, I determined to penetrate this supramundane region where the Hermit is at home, and selected for the purpose a well branched tree in the center of the forest and some hundred and fifty feet in height. The tree was, fortunately, of the tougher sort, and permitted ascent to a point where the stem might be grasped with the finger and thumb of one hand. It was a treat to see the forest as a bird does. The surface viewed from above was surprisingly uneven. Here and there strong young trees, green and full of sap, rose to the level of mine, but the majority were lower, and some appeared like green rosettes set in a well of green. Others still, rugged and uneven as to limb, towered above my station by fifty or seventy-five feet. My first discovery upon reaching the top was that the bulk of the bird chorus now sounded from below. But a few singing Hermits did occupy stations more lofty than mine. One I marked down—rather, up—



HERMIT WARBLERS.

fifty feet above and a hundred yards away. He sang away like a contented eremite from a single twig, and I was reverently constructing his high biography and trying to pick out his domicile from the neighboring branches, when flash! he pitched headlong two hundred feet and was seen no more.

Mr. Bowles has hit upon a clever scheme for decoying the haughty Hermits. He resorts to the vicinity of some Cassin Vireo's nest containing young, and studies the throng of small birds, which the masterly scolding of the Vireos invariably attracts. Upon one such occasion, having lured down an inquisitive pair, he noticed a peculiar trait: "After examining me closely and apparently deciding that I was a new kind of stump, the female commenced feeding; but her attention was soon attracted to a last year's nest of a Russet-backed Thrush. She at once flew to it and, hopping in, crouched down and commenced trampling the bottom, turning around, putting the material on the sides into shape with her bill, and altogether acting as tho she had nest-building well under way. This was about the middle of May, and, as I subsequently discovered, almost a month too early for her to lay her eggs."²

The nest of this species is still rare. The only one taken in Washington was found by Mr. Bowles, June 11, 1905, in a fir tree near Tacoma, and contained five eggs, the only set of five yet recorded. The nest was placed at a height of twenty feet on a horizontal limb six feet from the trunk of the tree. Mr. Bowles had seen the tail of the bird from below as it projected over the brim of the nest, and prepared himself to inspect "another of those Audubons." When, instead of the yellow crown-patch of an Audubon, he saw the lemon-yellow head of a Hermit, the oölogist nearly fainted from surprise and joy. The bird sat so close that the collector was obliged to lift her from the nest, and she then flew only a few feet, where she remained, chipping and spreading her wings and tail. The male at no time put in an appearance.

The nesting range of this species is still imperfectly made out. We found it common at Newport in Stevens County, and among the pines and larches of the Calispell range. We counted them common in the valley of the Stehakin also, but soon encountered that peculiar plagiarism of song, on the part of the Townsend Warbler, which queered all our local conclusions. In order, therefore, to guide the student in further investigations, I record a few variant song forms which I have clearly traced to the Hermit Warbler: *Zeeyle, zeeyle, zeeyle, zeeet*, fuzzy and low like that of *D. nigrescens*—this was heard at Tacoma and is recognized by C. W. Bowles as being the type form of southern Oregon songs; *dzee dzeé, tziid-zee dzeé, dzee dzeé* in a sort of sing-song rollick; *dzudzudzudzudzeeó zeeó zeeet*—first syllables very rapid, musical; nasal turn to accented notes very like the "ping" note of the Creeper song, and occupying much the same position save that it is repeated; *days, days, days, days zeeé*—the first notes lisping, with slight accelerando, and the nasal ringing quality reserved for the last.

² The Condor, Vol. VIII., March 1906, p. 41.

No. 79.

TOLMIE'S WARBLER.

A. O. U. No. 680. *Oporornis tolmiei* (Townsend).**Synonym.**—MACGILLIVRAY'S WARBLER.

Description.—*Adult male in spring and summer:* Fore-parts in general, including head and neck all around and chest, blackish slate or slate gray; extreme forehead and lores jet black; feathers of lower chest slate-black narrowly fringed with ashy gray; extreme chin usually white; a sharp touch of white on upper eyelid behind and a longer one on lower lid; remaining plumage bright greenish yellow to olive-green, clearest yellow, canary to olive-yellow, on breast and remaining underparts, centrally, and on bend of wing, shading thru yellowish olive green on sides to olive-green of upperparts; outer primary edged with white on outer web. Bill dusky brown above, paler below; feet and legs light brown; iris brown. *Adult male in fall and winter:* Similar but feathers of auriculars and hindneck and sometimes crown tipped with dull brown; ashy skirtings of throat and chest more extensive, sometimes nearly concealing the black. *Adult female in spring:* Like male but slate of hood replaced by dull brownish gray (mouse gray) above and by pale brownish gray on chin, throat and chest. In fall plumage still more extensively gray below. *Young females* lack the hood altogether being simply olive green on crown, yellow on throat, etc. Length about 5.50 (139.7); wing 2.44 (62); tail 2.16 (55); bill .45 (11.4); tarsus .85 (21.6).

Recognition Marks.—Warbler size; slaty hood of male distinctive; contrast of color between chest and breast usually apparent. A frequenter of thickets, with a sharp *tsick* or *chuck* note of alarm.

Nesting.—*Nest:* in thickets in upright crotch of bush from six inches to three feet from ground; a bulky affair of coarse dead grass, rootlets and trash, lined with fine black rootlets and horse-hair; measures, outside, $4\frac{1}{2}$ wide by $2\frac{1}{2}$ deep, inside, $2\frac{1}{2}$ wide by $1\frac{1}{4}$ deep. *Eggs:* 3-5, usually 4, dull white, heavily marked around larger end with reddish browns and lavender. Av. size, .70 x .54 (17.8 x 13.7). *Season:* first week in June; one brood.

General Range.—Western United States and British Columbia breeding south to Arizona and western Texas; east during migrations to western Nebraska, etc.; south in winter to Cape St. Lucas and over whole of Mexico and Central America to Colombia (Bogota).

Range in Washington.—Summer resident in dense thickets thruout the State from sea level to about 2,000 feet elevation.

Authorities.—*Sylvia tolmiei* Townsend, Narrative, April 1839, 343 (Columbia River). C&S. L. Rh. D. Sr. Ra. D. Ss. Kk. J. B. E.

Specimens.—U. of W. P. Prov. B. E.

WE shall have to import the word "chaparral" if we are to characterize with any brevity the sort of cover this Warbler loves. A great confusion of willow, alder, dogwood, syringa, ocean-spray, and huckleberry is his delight.

It matters not whether it be a hillside in King County, a lonesome spring draw in the hills of Klickitat, or the borders of a swamp in Okanogan, if only there be cover and plenty of it. No more persistent skulker haunts the shrubbery than this wary, suspicious, active, and very competent Wood Warbler. Yet even he, when he thinks no one is looking, emerges from his shrubbery depths, selects a topmost twig and breaks out in song,—a song which is neither diffident nor uncertain. *Sheep sheep sheep shear shear sheep*, he announces in a brisk, business-like tone, totally devoid of musical quality. And when you have heard him once, or, say, a hundred times, you have learned all that may be known of the Tolmie Warbler—out of cover. Those who know the Dickcissel of the middle West will at once be struck with the close similarity of its song, altho it must be admitted that the Warbler's is lighter in quality and less wooden. Practically, the only variety is in the number of syllables and in the number and distribution of the *r*'s; thus, *Sheep, sheep, shear, shear, sheep; Sheep, sheep, shear, shear, sheep, sheep*; and, a shade more emphatic, *Jick, jick, jick, jick, shear, sheep*.

For all we see so little of the Tolmie Warbler, the converse is by no means true. That is to say, the bird does see a great deal of us if we frequent the thickets. Whenever there is anything doing in his vicinity, the Warbler promptly and silently threads the intervening mazes, takes observations of the disturber from every angle, and retires with, at most, a disapproving *chuck*. In the fall of the year discipline is somewhat relaxed, and a little judicious creeping in the shrubbery will call up platoons of these inquisitive Warblers.

Owing partly to the caution of the sitting female, and more to the density of its cover, the nest of the Tolmie Warbler is not often found. When approached the bird glides away silently from her nest, and begins feeding ostentatiously in the neighboring bushes. This of itself is enough to arouse suspicion in an instructed mind, for the exhibition is plainly gratuitous. But the brush keeps the secret well, or, if it is forced, we find a bulky, loose-built affair of coarse dead grasses and rootlets, lined with black rootlets or horse-hair, and placed either in an upright fork of a bush, or built around the ascending stems of rank herbage at a few inches or at most two or three feet from the ground. Eggs, usually four in number, are deposited about the first week in June, and Tolmie babies swarm in July and August, quite beyond the expectation of our oölogical fore season.

A word of explanation regarding the change of name from Macgillivray to Tolmie is in order. Townsend discovered the bird and really published it first, saying,^a "I dedicate the species to my friend, W. T. Tolmie, Esq. of Fort Vancouver." Audubon, being entrusted with Townsend's specimens, but disregarding the owner's prior rights, published the bird independently, and tardi-

^a "Narrative," April 1839, p. 343.



TOLMIE WARBLERS.

ly, as it happened, as *Sylvia macgillivrayi*, by which specific name it was long known to ornithologists. Macgillivray was a Scotch naturalist who never saw America, but 'Tolmie was at that time a surgeon and later a factor of "the Honorable the Hudson Bay Company," and he clearly deserves remembrance at our hands for the friendly hospitality and coöperation which he invariably extended to men of science.

No. 80.

GRINNELL'S WATER-THRUSH.

A. O. U. No. 675 a. *Seiurus noveboracensis notabilis* Ridgw.

Description.—*Adults*: Above sooty olive-brown, singularly uniform; below white or tinged with pale yellow, everywhere (save on abdomen, centrally, under tail-coverts and extreme chin) streaked with sooty olive, the streaks small and wedge-shaped on throat, increasing in size posteriorly on breast, sides and flanks (where nearly confluent on buffy ground); a superciliary stripe continuous to nostril pale buffy; a crescent-shaped mark of same shade on lower eyelid; cheeks and auricular region finely streaked with pale buffy and color of back. Bill dark brown above, lighter below; feet pale; iris brown. *Young birds* are finely barred with buffy above and have two buffy wing-bars; underparts heavily and indistinctly streaked with dusky on pale yellow ground. Length 6.00 (15.2) or over; wing 3.00 (7.6); tail 2.10 (5.3); bill .53 (1.35); tarsus .85 (2.17).

Recognition Marks.—Warbler size; plain brown above; white (or pale yellow) heavily streaked with dusky below; a prominent buffy stripe over eye.

Nesting.—Does not breed in Washington. *Nest*: on the ground or in roots of upturned tree; of moss and leaves, lined with fine rootlets and tendrils. *Eggs*: 4 or 5, white or creamy white, speckled or wreathed with reddish browns. *Av. size*, .80 x .60 (20.3 x 15.2). *Season*: May 20-June 10; one brood.

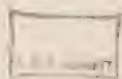
General Range.—Western North America; breeding from Minnesota, western Nebraska and the northern Rocky Mountains north to Alaska and Siberia (East Cape); southward during migrations over Western States and Mississippi Valley, less commonly thru Atlantic coast States, to West Indies, Mexico, Central America and Colombia.

Range in Washington.—Conjectural—should be not uncommon migrant.

Authority.—*S. noveboracensis*, Baird, Review Am. Birds, 1865, 215 ("Camp Moogie, Washington").

Specimens.—P (Alaskan), Prov.

WHILE we have only one record, and that an old one, there is every reason to suppose that this species traverses our borders annually, since it breeds in the middle mountain districts of British Columbia (Rhoads), is abundant in Alaska (Nelson), and migrates southward thru the western United States (Ridgway). The Water-thrush should be looked for in May



along the shaded banks of streams, but may possibly be found along more open margins, consorting with Pipits, with which it shares a restless habit of jutting, or curtseying, whimsically.

No. 81.

WESTERN YELLOW-THROAT.

A. O. U. No. 681 a. ***Geothlypis trichas occidentalis*** Brewster.

Description.—*Adult male in spring and summer:* Above grayish olive-green, brighter (less gray) on upper tail-coverts and tail, inclining to brownish on crown and hindneck; an obliquely descending facial mask of black involving forehead, lores, space about eyes, cheeks and (more narrowly) sides of neck; along the posterior margin of this mask a narrow sharply contrasting area of clear ash or white; chin, throat and breast rich yellow (inclining to gamboge); sides of breast and sides heavily shaded with olive-gray and breast more or less washed with same; lower breast and below between yellow and palest olive-gray; under tail-coverts and bend of wing clear yellow. *Adult male in autumn:* Occiput more decidedly brown; upperparts clearer olive-green. *Young male in first autumn:* Mask of adult merely indicated by black underlying sooty-brown on sides of head; coloration of underparts duller. *Adult female in spring:* Like adult male but without black mask and ashy edging; crown and sides of head olive gray; forehead tinged with brown; region above and about eye notably paler; coloration of underparts duller and paler, sometimes clearly yellow on under tail-coverts alone. *Young female in first autumn:* Similar to adult but underparts still duller and dingier, breast and sides heavily washed with brownish olive. Length of adult about 5.00 (127); wing 2.26 (57.5); tail 2.19 (55.8); bill .44 (11.3); tarsus .83 (21).

Recognition Marks.—Warbler size; black mask and white fillet of male distinctive. The female is a much more difficult bird to recognize—perhaps best known by peculiar sordid olive-brownish-yellow shade of underparts. The pale orbital area also assists, but one must live with these birds to know them infallibly.

Nesting.—*Nest:* of coarse grasses lined with fine grass and horse-hair; placed 1-2 feet high in tussock of grass or rank herbage, usually near water; outside $4\frac{1}{2}$ wide by $3\frac{1}{2}$ deep, inside $2\frac{1}{4}$ by $1\frac{1}{2}$. *Eggs:* 4 or 5, dotted and spotted or, rarely, streaked with blackish and lavender. Av. Size, .70 x .56 (17.8 x 14.2). *Season:* May 20-June 10; one brood.

General Range.—Western United States and British Columbia, except Pacific coast district, east to western portions of the Great Plains; breeding southward into Mexico and northern Lower California; in winter south to Cape St. Lucas and western Mexico.

Range in Washington.—Summer resident east of the Cascade Mountains; found chiefly in rye-grass districts and in vicinity of water.

Migrations.—*Spring*: Altatum (Yakima Co.) March 29, 1900.

Authorities.—**Dawson**, Auk, XIV. April, 1897, 179. D^r. Sst. Sst. J.

Specimens.—U. of W. P. Prov.

COARSE grass, stunted bushes, water, and sunshine seem to be the chief requirements of this very individual bird. To obtain the first-named, especially if represented by his favorite rye-grass, he will forsake water within reasonable limits; but his preference is for a grassy swamp dotted with bushes, and he does not overlook any considerable area of cat-tails and tulés. Yellow-throat is a restless, active little body, and he is among the first to come forward when you enter the swamp. His method is hide-and-seek and the game would all be his, if he did not reveal his presence from time to time by a harsh accusing note, a sort of Polish, consonantal explosion, *wezschthub*,—a sound not unlike that made by a guitar string when struck above the stop. If you attempt to follow the bird, the game ends in disappointment. But if the observer pauses, curiosity gets the better of the bird, and he is soon seen peering out from a neighboring bush, roguery only half hidden by his highwayman's mask.

The female, having no mask, keeps to the background, but she is not less interested than her mate in the progress of events. When the scout returns to report, there is often a curious outbreak of discussion, in which the husband, as like as not, finds it necessary to defend his opinion with a perfect torrent of *wezschthubs*.

Yellow-throat's song is one of the few explicit things in the swamp. Mounting a weed-stalk, he rubs out, *Witchity, witchity witchity*, or "*I beseech you, I beseech you, I beseech*." Rhythm is the chief characteristic of this song, and altho a given bird appears to be confined to a single type, the variety of "feet" offered by a swamp is most entertaining. *Reéskéitte, reéskéitte, ril'*, was the cadence of a Douglas County bird; while *chitoooreef, chitoooreef, chitoooreef, chu*, heard at Chelan, reminded me of the Kentucky



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A WESTERN YELLOW-THROAT'S NEST.
NEST CONTAINS TWO EGGS OF THE YELLOW-THROAT AND
TWO OF THE COWBIRD.

Warbler (*Oporornis formosa*). The bird has also an ecstasy song, "a confused stuttering jumble of notes" poured out in hot haste in mid-air.

Like an echo from "the different world" came the song of a bird at Brook Lake. We had just been listening to the unwonted notes of a Desert Sparrow (*Amphispiza bilineata deserticola*) some hundreds of miles out of its usual range, and were not unprepared for shocks, when *Hoo hee, chink i too chu tip* fell upon the ear. What! a Slate-colored Sparrow here in the sage brush! Or is it, maybe, a Vesper, grown precise? Again and again came the measured accents, clear, strong, and sweet. Not till I had seen the mandibles of a Western Yellow-throat, and that repeatedly, moving in perfect rhythm to the music, could I believe so small a bird the author of this song. For fifteen minutes the Warbler brought forth this alien strain, *Hee-o chiti too, chu tip* or *Hee oo chitikeew chu tipew* without once lapsing into ordinary dialect. Wherever did he get it?

My nests have nearly all been found in June and, I guess, they may have contained second sets, for the bird sometimes reaches Yakima County as early as March 29th. One was sunk in a tussock of grass within eight inches of the swamp water, and I nearly stepped on the female before she flew. Another was lashed at a height of two feet to a group of rank weeds, some forty feet removed from a lazy brook. A third, shown in the illustration, we found while dragging over a dense patch of rye-grass, some three hundred yards from water. The nest was composed entirely of the flattened and macerated leaves of old rye-grass gleaned from the ground, with a scanty lining of horse-hair. It was simply set, or wedged, in between the stiff, upgrowing stalks of grass at the height of a foot, and was not attached in any manner to its supports. The male bird, strange to say, was covering the eggs, of which two belonged to that contemptible shirk, the Cowbird.

No. 82.

THE PACIFIC YELLOW-THROAT.

A. O. U. No. 681 c. ***Geothlypis trichas arizela*** Oberholser.

Synonym.—PUGET SOUND YELLOW-THROAT.

Description.—*Adults*: Very similar to *G. t. occidentalis* and with corresponding changes but throat, etc., rich lemon yellow (inclining to greenish, whereas *occidentalis* inclines to orange); more yellow in grayish olive green of upper-parts; ashy border of mask said to average more narrow (very doubtful). Alleged differences in measurements are inconsequential.

Recognition Marks.—As in preceding.

Nesting.—Much as in preceding form but birds more nearly confined to

vicinity of water. *Eggs*: 4. Av. size, .76 x .53 (19.3 x 13.5). *Season*: first week in May, first week in June; two broods.

General Range.—Pacific coast district, from British Columbia southward; breeding southward to Los Angeles County, California, and eastward to Fort Klamath, Oregon; during migration to Cape St. Lucas" (Ridgw.).

Range in Washington.—Summer resident in fresh and salt water marshes west of the Cascades.

Migrations.—*Spring*: Tacoma, April 12, 1905, April 6, 1906.

Authorities.—? Audubon, Orn. Biog. V. 1839, 463, part (Columbia River). *Geothlypis trichas*, Baird, Rep. Pac. R. R. Surv. IX, 1858, 241, part. (T). C&S. 17. Ra. B. E.

Specimens.—Prov. B. E.

IN OUR younger days some of us were taught to be seen and not heard. Among the Yellow-throats the children are taught the opposite. A bird that can call "Witch-et-y! Witch-et-y! Witch-et-y!" in a dozen different places thru the swale and in the meantime can keep out of sight while you are looking for him, is a well brought-up Yellow-throat. We were taught to tell the truth, but deceit is drilled into the Yellow-throat children from the time they leave the egg. A human mother insists upon your looking at her children, but at the approach of a visitor the Yellow-throat mother sneaks off the nest and away thru the bushes for the sole purpose of persuading you the home is in the reeds on the other side of the creek. This may be wrong according to our teaching, but it is perfectly right according to the Yellow-throat's code of morals.

If you want to see Yellow-throat, you must go down along the swale or visit some damp thicket or swamp. He likes the rushes and the reeds where the Red-winged Blackbird and the Tule Wren live. I once found a Red-wing's nest and a Yellow-throat's home within a few feet of each other. If you want to see this ground warbler, go to his haunt. He will see you first but lie down quietly among the bushes. He will likely get curious and hop up out of the reeds. You may get just one good look before he darts away into the bushes again.

The male Yellow-throat always wears plain marks of recognition on his face. He has a black mask extending across his forehead and back on the sides of his head. The female goes without a mask and is clothed in subdued tints of yellow and brown.

When the Yellow-throat seeks a home, he finds a thick tussock of grass and hides his nest well in the middle. It is my experience that when you want to find his home, it is better not to look for it. If you keep on tramping thru the swamps and swales, some day you will stumble on one when you least expect it. Once I hunted for several days about a swampy place where I heard the Yellow-throats singing. Not a sign of a nest did I find. Whenever I appeared the birds were on hand as if



Taken in Oregon.

Photo by H. T. Bohlman and W. L. Finley

AN ENTHUSIASTIC RECEPTION.
MALE PACIFIC YELLOW-THROAT FEEDING YOUNG.

very anxious to aid me in finding their home. After tiring me with their deceit, they sneaked away fifty yards to the nest. A little later in the season I happened to see the father carrying worms and discovered the young Yellow-throats just about to leave home.

WILLIAM L. FINLEY.

No. 83.

WESTERN CHAT.

A. O. U. No. 683 a. *Icteria virens longicauda* (Lawrence).

Synonym.—LONG-TAILED CHAT.

Description.—*Adult male*: Above grayish olive-green; fuscous on exposed inner webs of wings and tail; a prominent line above lores and eye, a short malar stripe, and eye-ring, white; enclosed space black on lores, less pure behind; throat, breast, lining of wings, and upper sides rich gamboge yellow; lower belly and crissum abruptly white; sides washed with brownish; bill black; feet plumbeous. *Adult female*: Very similar; bill lighter; lores and cheek-patch dusky rather than black; black appreciably lighter. *Young*: Bill olive above; head markings of adult faintly indicated; below grayish white, darker on breast, buffier behind.

Length 6.75-7.50 (171.5-190.5); wing 3.07 (.78); tail 3.01-3.30 (76.5-86); bill .57 (14.5); tarsus 1.04 (26.5).

Recognition Marks.—Strictly "Sparrow" size, but because of bright color having nearer the size value of Chewink;—the largest of the Warblers. Bright yellow breast with contrasting white below, with size, distinctive.

Nesting.—*Nest*: a bulky and often careless structure, 7 inches wide and 4 inches deep outside, 3 inches wide and 1½ deep inside; of coarse grasses and weed-stems, lined with finer grasses or rootlets, placed in upright fork of bush or small tree in thicket. *Eggs*: 4, white, somewhat glossed and marked irregularly with spots and dots of lavender and rufous, most heavily, or not, about larger end. Av. size, .89 x .68 (22.6 x 17.3). *Season*: first week in June; one brood.

General Range.—Western United States from near eastern border of Great Plains west to the Pacific Coast, breeding north into south-central British Columbia southward to valley of Mexico; in migration south in winter to Mexico.

Range in Washington.—Summer resident in thickets about springs and streams of eastern Washington; does not deeply invade mountains; rare or casual west of Cascades (Tacoma, June 4, 1905, by J. H. Bowles; Sumas, B. C., May 26, 1897, by Allan Brooks).

Migrations.—*Spring*: May 18, 1900 (Yakima county).

Authorities.—? *Icteria viridis* (Bonap.), Townsend, Journ. Ac. Nat. Sci., Phila., VII., 1839, 153 (N. W. United States). *Iuct.* Cooper and Suckley, Rep. Pac. R. R. Surv. p. 288 ("Towns. and Nuttall. Seen at Walla-Walla, Washington Territory"). **Dawson**, Auk, XIV., 1897, p. 179. (T). D¹. D². Ss¹. Ss². B.

Specimens.—(U. of W.) P¹. Prov. B.

STRUCTURALLY allied to the Wood Warblers, the Chat has yet such a temperamental affinity with the Catbird, that it is difficult, for me, at least, to dissociate the two birds in thought. Both love the thickets; both excel in song; both plague their neighbors by mimicry; and both alike are dearly provoking bundles of contradictions. The Chat is, perhaps, the greater buffoon, as he is certainly the more handsomely dressed of the two. Beyond this we must consider him on his own merits.

Ten to one you know him, if at all, only as a voice, a tricky bush-whacker of song, an elusive mystery of the thicket; or you have unconsciously ascribed his productions to half a dozen mythical birds at once. But look more closely. It is well worth the quest to be able to resolve this genius of roguery. Be assured he knows you well enough by sight, for he does not poke and pry and spy for nothing, in the intervals of song. He has still the proverbial curiosity of woman. Seat yourself in the thicket, and when you hear the mellow, saucy *Kook*, with its whistled vowel, bounded by consonants barely thought of, imitate it. You will have the bird up in arms at once. *Kewook*, returns the bird, starting toward you. Repeat it, and you have won. The bird scents a rival and he will leave no stem unclasped but he finds him. As the bird alternately squints and stares from the brush, note the rich warbler olive of his upperparts, the gorgeous yellow of the throat and breast,

the white brow-stripe and the malar dash, offset by black and darker olive. It is a warbler in color-pattern, a Yellow-throat done larger, but waggish, furtive, impudent, and resourceful beyond any other of his kind.

The full song of the Chat is usually delivered from some elevation, a solitary tree rearing itself above dense cover. The music almost defies analysis, for it is full of surprises, vocal somersaults, and whimsy turns. Its cadence is ragtime, and its richest phrases are punctuated by flippancy jests and droll parentheses. Even in the tree-top the singer clings closely to the protecting greenery, whence he pitches headlong into the thicket at the slightest intimation of approach.

The love song of the Chat, the so-called "dropping song," is one of the choicest of avian comedies, for it is acted as well as sung. The performer flings himself into mid-air, flutters upward for an instant with head upraised and legs abjectly dangling, then slowly sinks on hovering wing, with tail swinging up and down like a mad pump-handle. Punch, as Cupid, smitten with the mortal sickness. And all this while the zany pours out a flood of tumultuous and heart-rending song. He manages to recover as he nears the brush, and his fiancée evidently approves of this sort of buffoonery.

The Chat is a skilled mimic. I have traced the notes of such diverse species as Bullock Oriole, Slender-billed Nuthatch, and Magpie to his door. Once, down on the Rio Grande, we rapped on a vine-covered cottonwood stump to dislodge a Flicker that had been shrieking *Klyak* at us for some minutes past, and we flushed a snickering Chat.

The Western Chat, like the eastern bird, has small taste for architecture. A careless mass of dead leaves and coarse grasses is assembled in a bush at a height of three or four feet, and a lining of finer grasses, when present at all, is so distinct as to permit of removal without injury to the bulk of the structure. From three to five eggs are laid and so jealously guarded that the birds are said to destroy the eggs once visited by man. So cautious are the Chats that even after the young have hatched out, they take care not to be seen in the vicinity of their nest, but a low, anxious *chuck* sometimes escapes from the harassed mother in a neighboring thicket.

Chats will follow suitable cover into most desolate places. On the other hand they do not discriminate against civilization *per se*, and the Chats of Cannon Hill, in Spokane, are as grateful to the good sense of its citizens as are the Catbirds and two score other resident species of songsters. They are, however, birds of the sunshine belt, and West-side records are very few.

No. 84.

PILEOLATED WARBLER.

A. O. U. No. 685 a. *Wilsonia pusilla pileolata* (Pallas).

Description.—*Adult male*: Above bright olive green; forehead, sides of head, and underparts bright greenish yellow, tinged on sides with olive-green; crown, or "cap," lustrous black; wings and tail fuscous and olive-edged without peculiar marks; bill dark above, light below; feet light brown. *Adult female*: Similar, but the black cap wanting, or, if present, less distinct. *Immature*: Like female without cap. Length about 4.75; wing 2.20 (56); tail 1.97 (50); bill .38 (8.5); tarsus .75 (18.8).

Recognition Marks.—Least,—pygmy size; black cap of male distinctive; recognizable in any plumage by small size and greenish yellow coloration. Brighter than *W. pusilla*; not so bright as *W. p. chryscola*.

Nesting.—As next.

General Range.—Western North America, breeding thruout the Rocky Mountain district, north to Alaska, west to Cascade Range in Oregon and Washington and to Vancouver Island; during migrations over the entire western United States, and east irregularly to the Mississippi; south in winter over Mexico and Central America.

Range in Washington.—Not common resident and abundant migrant on East-side; migrant only west of Cascades.

Migrations.—*Spring*: May 1-15.

Authorities.—Dawson, Auk XIV., 1897, 180. (T). (C&S), D¹, Kb. D², J. E.

Specimens.—B. B.N. E. P.

THE pervading yellowness of this little bush-ranger will hardly serve to distinguish it from the equally common Lutescent Warbler, unless you are able to catch sight of its tiny silken crown-patch of black, the "little cap" which gives the bird its Latin-sounding name. With *chryscola* it is the smallest of our warblers, and it is one of the commonest, during migrations, on the East-side. The thickets have taken on full leaf before the bird arrives from the South, along about the 10th of May, and the northward march is often prolonged till the first of June. So expert is the little Black-cap at threading briary tangles, that a meeting here depends upon the bird's caprice rather than the astuteness of the observer. Willow trees are favorite stations during the spring movement, and these because of their scantier foliage afford the best opportunities for study.

My impression is that the Pileolated Warbler must breed sparingly in eastern Washington. There is, however, only one summer record to substantiate this belief,—a bird seen in the valley of the Stehekin, June 22nd, 1906. The only song I have heard differed from the abruptly terminated crescendo of *W. p. chryscola*, being rather a well modulated swell, *chip chip! chip!! chip!!! chip!!! chip!! chip! chip!*

GOLDEN WARBLER

MALE, 4/5 LIFE SIZE

FROM A WATER-COLOR PAINTING BY ALLAN BROOKS



Yellowthroat

No. 85.

GOLDEN WARBLER.

A. O. U. No. 685 b. *Wilsonia pusilla chryseola* Ridgw.

Synonym.—GOLDEN PILEOLATED WARBLER (properly so-called, but the bird, because of its local abundance deserves the shorter name. Moreover, altho "golden" is the commonest color among the Warblers, the name has not been pre-empted).

Description.—"Similar to *W. p. pileolata*, but slightly smaller and much more brightly colored; olive-green of upperparts much more yellowish, almost olive-yellow in extreme examples; yellow of forehead and superciliary region (especially the former) inclining more or less to orange; yellow of underparts purer, more intense" (Ridgway). Length of adult males (skins) 4.35 (110); wing 2.18 (55.4) tail 1.93 (49.1); bill .33 (8.3); tarsus .72 (18.2).

Recognition Marks. As in preceding; brighter.

Nesting.—*Nest*: a shapely and thick-walled mass of dead leaves, grasses and vegetable fibers, lined with coiled grasses or hair, on the ground or concealed at moderate heights in weeds, bushes, evergreen saplings, etc. *Eggs*: 3-5, white or creamy white, speckled and spotted with reddish brown markings, well distributed or gathered about larger end. Av. size .59 x .48 (15 x 12.2). *Season*: May 15-30; one brood.

General Range.—Pacific Coast district from southern California to southern British Columbia.

Range in Washington.—Summer resident in western Washington; common in well-watered forests at lower levels and in thickets from sea-level to higher mountain valleys.

Migrations.—*Spring*: Arrives Puget Sound April 25-May 5. *Fall*: Blaine, Sept. 15.

Authorities.—*Myiodioides pusillus* Bonap., **Baird**, Rep. Pac. R. R. Surv. IX. pt. II., 1858, p. 294 (part). C&S. L^t. Ra. B. E.

Specimens.—U. of W. E.

THIS dainty little Warbler is one of the most characteristic and well distributed birds of western Washington. Its summer range embraces all shady and moist woods having varied undergrowth; and it is at home alike on the sides of the western Cascades, in the swampy bottoms tributary to Puget Sound, or under the dense spruce forests of the Pacific slope. It is certainly one of the most abundant birds in the last-named section, and its golden flittings not only dominate the fern levels but extend upward into the mossy arms of the evergreens. A brilliant dress does not appear to endanger the life of this little despot, for he is quite too insignificant for notice among the Knights of Claw and Jaw, and so he flashes in and out, scolds, sings, and meditates, by turns, without molestation.

Nor is there any lack of interest in the life of this golden midget. Have you never wished that you were tiny—oh, *teeny*—with beady black eyes, that you might explore the mysteries of a moss forest? that elderberries might look to you like great blue pippins? and madrone berries like luscious fiery pumpkins? that you might pluck a thousand sapid meats at first hand where now you know only a few "staples," disguised by the meretricious arts of cookery? That you might—Ah, here I have you!—that you might pantingly pursue a golden maiden down dim forest aisles, over plunging billows of spiraea blossoms, past corridors of giant sword-fern, into—Oh, where is that maddening creature! She's given me the slip again! Never mind; I'll pause and sing: *oooooc'c'c'c'c'c'c'oooo*.

Truth to tell, the song just recorded is one of the rarest, a perfectly modulated swell of sharp staccato notes of little resonance but greater power and intensity. The ordinary song is a series of monosyllables uttered with increasing emphasis, *chip chip chip chip CHIP CHIP*. The singer is very much in earnest, and compels attention in spite of his utter lack of musical ability. Late in August, the 26th it was, I provoked a Black-cap at Blaine by screeching, until he sang merely to relieve his feelings, *chip chip CHIP chip chip chip chip*, the precise type of the Pileolated Warbler, *H. p. pileolata* proper. The only other variant in my collection is *tsee tsee tsee tsee tsee tsee, tchhhackity*,—the last note, somewhat whimsically represented here, being an intense guttural trill very difficult to characterize.

Messrs. Rathbun and Renick, of Seattle, have made a special study of the nesting habits of this dainty wood nymph, and they report a marked partiality in its nesting for the vicinity of woodland paths, log-roads, and the smaller openings in the logged-off sections. The favorite host is a cedar sapling, a mere baby tree with stem only half an inch or so in diameter. Of nine nests examined only one, in a bracken, was more than two feet above the ground, and none were less than ten inches. The nest is quite a bulky affair, yet compact centrally, composed externally of copious dried leaves and twigs; internally of fine grasses and interwoven rootlets. The birds quit the nest unobserved and the finding of one of their domiciles is a matter of hard work.

No. 86.

AMERICAN REDSTART.

A. O. U. No. 687. *Setophaga ruticilla* (Linn.).

Description.—*Adult male*: Head and neck all around and breast shining black; remaining upperparts dull black with glossy patches, changing to brownish black or fuscous on wings; a large salmon-colored patch at base of secondaries; a smaller, nearly concealed patch of same color at base of primaries; the outer

web of the outer primary salmon nearly throat its length; the tail feathers, except the two middle pairs, salmon-colored on both webs for the basal two-thirds; two large patches of reddish salmon on the sides of the breast; the lining of the wings and the sides extensively tinged with the same color, occasionally a few touches across the chest below the black; lower breast, belly, and crissum, white; bill black; feet dark brown; black in variable amounts on sides of breast between the orange red spots; lower tail-coverts sometimes broadly tipped with blackish. *Adult female*: Above, brownish ash with an ochraceous or olive tinge on back; salmon parts of male replaced by yellow (Naples yellow), and the reddish salmon of sides by chrome yellow; remaining underparts dull whitish, sometimes buffy across chest. *Immature male*: Similar to adult female, but duller the first year; the second year mottled with black; does not attain full plumage until third season. Length 5.00-5.75 (127-146.1); av. of five males: wing 2.59 (65.8); tail 2.17 (55.1); bill .36 (9.1); tarsus .70 (18).

Recognition Marks.—Medium Warbler size; black with salmon-red and salmon patches of male; similar pattern and duller colors of female and young; tail usually half open and prominently displayed, whether in sport or in ordinary flight.

Nesting.—*Nest*, in the fork of a sapling from five to fifteen feet up, of hemp and other vegetable fibers, fine bark, and grasses, lined with fine grasses, plant-down and horse-hair. *Eggs*, 4 or 5, greenish, bluish, or grayish-white, dotted and spotted, chiefly about larger end, with cinnamon-rufous or olive-brown. Av. size .68 x .51 (17.3 x 13). *Season*: June; one brood.

General Range.—Temperate North America in general, regularly north to Nova Scotia, the Mackenzie River (Fort Simpson), etc., west to southern Alaska, British Columbia, eastern Washington, Utah, etc., casual in eastern Oregon, northern California, and in the southeastern states; breeding from the middle portion of the United States northward; south in winter thruout West Indies, Mexico and Central America to northern South America.

Range in Washington.—Rare but regular summer resident in northern portion of State east of Cascades (Methow Valley, Grand Coulee, etc.), casual (?) in the Blue Mountains.

Authorities.—[J. K. Lord in "Nat. in Vancouver Id. and B. C.", 1866, p. 162 (Colville Valley).] **Brewer**, Bull. Nutt. Orn. Club. V., 1880, 50 (Ft. Walla Walla). D. S. J.

Specimens.—C. P.

THE "start" of Redstart is from the old Anglo-Saxon *steort*, a tail; hence, Redstart means Redtail; but the name would hardly have been applied to the American bird had it not been for a chance resemblance which it bears to the structurally different Redstart of Europe, *Ruticilla phoeniceus*. In our bird the red of the tail is not so noticeable as is the tail itself, which is handled very much as a coquette handles a fan, being opened or shut, or shaken haughtily, to express the owner's varied emotions.

The Redstart is the presiding genius of woodland and grove. He is a bit of a tyrant among the birds, and among his own kind is exceedingly

sensitive upon the subject of metres and bounds. As for the insect world he rules it with a rod of iron. See him as he moves about thru a file of slender poplars. He flits restlessly from branch to branch, now peering up at the under surface of a leaf, now darting into the air to secure a heedless midge, and closing upon it with an emphatic snap, now spreading the tail in pardonable vanity or from sheer exuberance of spirits; but ever and anon pausing just long enough to squeeze out a half-scolding song. The paler-colored female, contrary to the usual wont, is not less active nor less noticeable than the male, except as she is restrained for a season by the duties of incubation. She is even believed to sing a little on her own account, not because her mate does not sing enough for two, but because she—well, for the same reason that a woman whistles,—and good luck to her!

During the mating season great rivalries spring up, and males will chase each other about in most bewildering mazes, like a pair of great fire-flies, and with no better weapons—fighting fire with fire. When the nesting site is chosen the male is very jealous of intruders, and bustles up in a threatening fashion, which quite overawes most birds of guileless intent.

Redstart's song is sometimes little better than an emphasescent squeak. At other times his emotion fades after the utterance of two or three notes, and the last one dies out. A more pretentious effort is represented by Mr. Chapman as "*Ching, ching, chee; ser-tee, stee, stee-c-c-c.*" Many variations from these types may be noted, and I once mistook the attempt of a colorless young stripling of one summer for that of a Pileolated Warbler.

Our Redstart shares with the Yellow Warbler alone the distinction of representing among us in *ipsa specie* the Warbler hosts of the East. Even so, our scanty summer population of Redstarts, confined as it is to the northeastern counties, appears to represent an overflow of the eastern hordes, or, perhaps, the van of occupation, rather than regularly established citizens. I have seen them as far south as Brook Lake, and as far west as Stehekin only; but Mr. Allan Brooks records a specimen from Chilliwack, in western British Columbia.

No. 87.

ALASKA HORNED LARK.

A. O. U. No. 474 a. *Otocoris alpestris arctica* Oberholser.

Synonyms.—ARCTIC HORNED LARK. PALLID HORNED LARK. WINTER LARK.

[Description of type form, *Otocoris alpestris*.—Adult male in breeding plumage: A narrow patch across fore-crown with ends curving laterally back-

ward and produced into a feather-tuft or "horn," black; a broad bar from nostril to eye thence curving downward and expanding to involve hinder portion of cheeks and auriculars anteriorly, black; a crescentic patch across upper chest black; forehead and superciliaries pale yellow (primrose yellow) paling posteriorly; auriculars yellow continuous with and deepening into straw yellow of chin, throat and malar region; remaining underparts white, the sides and flanks dull vinaceous streaked with dusky; upperparts in general warm grayish brown, the middle of crown, occiput, nape, lesser wing-coverts and upper tail-coverts vinaceous-cinnamon; back, scapulars and rump grayish brown, each feather edged with paler and having dusky center; wings hair-brown with paler edgings, the outermost primary edged with white; tail chiefly black, the middle pair of feathers dusky, edged with whitish, the two lateral pairs edged with white. Bill black lightening below (basally); legs and feet black; iris dark brown. *Adult female in summer*: Like male but duller and paler, the black areas reduced in extent and obscured by brownish or buffy tips; yellow of superciliary stripe, etc., duller and paler; upperparts more noticeably streaked and with less of vinaceous tint on hind neck and upper tail-coverts. *Both sexes in fall and winter* are somewhat more heavily and more uniformly colored save on black areas which are overcast by buffy or brownish tips; also forebreast dusky or obscurely spotted. *Young birds* are heavily speckled above with yellowish white on brownish and dusky ground. Length of adult male: 7.00-7.50 (177-190); wing 4.37 (111); tail 2.83 (72); bill .48 (12.2); tarsus .94 (24). Adult female: 6.75-7.25 (171-184); wing 4.09 (104); tail 2.48 (63); bill .43 (11.1); tarsus .91 (23.2).

Description.—*Adults*: Similar to *O. alpestris* but upperparts paler and grayer, less warmed by vinaceous; no yellow (or merest tinge on head and throat)—white instead; size about the same.

Recognition Marks.—Sparrow size; black crescent on upper chest; black cheek and crown patches; feather-tufts or "horns" directed backward. To be distinguished from *O. a. merrilli* and *O. a. strigata* by larger size and absence of yellow.

Nesting.—Not certainly known to breed in Washington but possibly does so above timber-line. *Nest*: a cup-shaped depression in the surface of the ground, plentifully lined with fine grasses, moss, grouse feathers, etc. *Eggs*: 3 or 4, greenish- or grayish-white, profusely and minutely dotted with olive-buff, greenish-brown and lavender. Av. size .95 x .66 (27 x 16.7).

General Range.—"Breeding in Alaska (except Pacific coast district) and valley of the Upper Yukon River, Northwest Territory; migrating southward to Oregon, Utah, Montana, etc." (Ridgway).

Range in Washington.—Common winter resident and migrant east of the Cascades. Birds breeding on the higher mountains are doubtfully referable to this form.

Authorities.—*O. a. leucoloma* (Coues), Dawson, Auk, XIV, 1897, 176. De J.

Specimens.—Prov.

THE Horned Lark bears the reputation of being the most plastic of American species—the Song Sparrow (*Melospiza melodia*) being a close sec-

ond in this respect. A monograph by Mr. H. C. Oberholser^a enumerates twenty-three forms, of which seventeen are described as North American, and four Mexican, beside one from Colombia (*O. a. peregrina*) and another (*O. a. flava*) from Eurasia. Of this number the majority occur west of the Mississippi River, where climatic conditions are more sharply differentiated, and where, especially in the Southwest, the situation allows of that permanent residence which is conducive to the development of subspecific forms.

The situation in Washington appears to be somewhat as follows: *O. a. strigata*, strongly marked, but showing relationship to *merrilli*, and likeness to *insularis*, of the Santa Barbara Islands, summers in western Washington in open prairies, and at low altitudes only. In winter it retires southward, or straggles irregularly eastward^b. *O. a. merrilli* is related to *strigata* on the one hand, and to *leucocola* (the Desert Horned Lark) on the other, but it curiously reproduces the appearance of *praticola* (being indistinguishable in certain plumages); and also bears close resemblance to *giraudi*, a non-migrant form of the Gulf shore of Texas. It summers thruout eastern Washington, and even (doubtfully) occupies the western coast of British Columbia. An isolated colony occurring on Mount Baker, above timber-line, is referred by Oberholser to this form, but I should prefer to call it an intergrade with *arcticola*. In winter *merrilli* retires completely from its Washington range, and its place is taken by *arcticola*, sweeping down from the highlands of British Columbia and Alaska in considerable numbers.

It is not at all difficult for one who is accustomed to the appearance of *merrilli* to recognize these newcomers when they appear, late in October, for they are decidedly larger, more lightly colored, and show no slightest trace of yellow. They are much given to wandering about in straggling flocks, and the mild cries which they scatter freely have a subdued and plaintive tone, borrowed, no doubt, from the chastened character of the season. A sitting flock will sometimes allow a very close approach, but when they do so they "freeze," so perfectly that the eye can scarcely find them. The only thing to do under such circumstances is to freeze also, until the birds begin to limber up and steal cautiously away, taking advantage, for concealment, of every tuft of grass or depression of the ground, and giving occasional admonitory yips to their fellows.

^a. A Review of the Larks of the Genus *Otocoris*, Proc. U. S. Nat'l Mus., Vol. XXIV., pp. 801-884, 1902.

^b. Much clearer testimony is required on this point. Oberholser, *op. cit.*, p. 839, cites a record for Colton in Whitman County, but I have never seen this form in Yakima County; and it would seem reasonable that a bird should forsake the mild climate of Tacoma to endure the more severe winters and less certain food supply of the East-side.

No. 88.

COLUMBIAN HORNED LARK.

A. O. U. No. 474 i. *Otocoris alpestris merrilli* Dwight.**Synonyms.**—DUSKY HORNED LARK. MERRILL'S HORNED LARK.**Description.**—Similar to *O. a. strigata* but somewhat larger and decidedly grayer above, streaks narrower and dusky rather than black; underparts not suffused with yellowish and yellow of head, especially superciliary, not so strong as in *O. a. strigata*. Length (skins) 6.25 (159); wing 4.05 (103); tail 2.32 (59); bill .43 (11); tarsus .85 (21.6).**Recognition Marks.**—As in preceding; smaller, darker and more yellow than *O. a. arctica*; larger, grayer and less yellow than *O. a. strigata*.**Nesting.**—*Nest and eggs* as in preceding. Av. size of eggs .93 x .61 (23.6 x 15.5). *Season:* April-July; two or three broods.**General Range.**—Breeding in northwestern interior district of the United States from northwestern Nevada and northeastern California north thru Oregon and Washington well up into British Columbia, east to Idaho; south in winter (at least) to central California.**Range in Washington.**—Common summer resident and migrant east of the Cascades. Breeding birds of the high Cascades may possibly be of this form.**Authorities.**—*Ereunophila alpestris*, **Brewster**, B. N. O. C. VII. Oct. 1892, p. 227. D. S. D., S. S., J. E.**Specimens.**—Pl. Prov. E(?).

A MODEST bird is the Columbian Horned Lark, for his home is on the ground, and he hugs its tiny shelters when disturbed, as tho quite assured that its brownness matches the tint of his back. If attentively pursued, he patters away half trustfully, or if he takes to wing, he does so with a deprecating cry of apology, as if the fault were his instead of yours. If his business keeps him in the same field, he will reappear presently, picking from the ground with affected nonchalance at a rod's remove, or else pausing to face you frankly with those interesting feather-tufts of inquiry, supported by black moustachios and jetty gorget on a ground of palest primrose.

The unseeing class the Horned Larks among "brown birds" and miss the vaulting spirit beneath the modest mien. Yet our gentle Lark is of noble blood and ancient lineage. The Skylark, of peerless fame, is his own cousin; and, while he cannot hope to vie with the foreign bird in song, the same poet soul is in him. Whether in the pasture, upon the hillside, or in the desert, the coming of spring proclaims him laureate; and the chief vocal interest of nesting-time centers in the song-flight of the male Horned Lark.

The song itself is, perhaps, nothing remarkable, a little ditty or succession of sprightly syllables which have no considerable resonance or

modulation, altho they quite defy vocalization; yet such are the circumstances attending its delivery that it is set down by everyone as "pleasing," while for the initiated it possesses a charm which is quite unique. *Twidgy-zwidgy*, *zwidgity*, *zwidgy-zwidgy*, conveys no idea of the tone-quality, indeed, but may serve to indicate the proportion and tempo of the common song; while *Twidgy*, *zwidgity*, *celooy*, *celooy*, *idgity*, *celooy*, *ceve*, may serve the same purpose for



COLUMBIAN HORNED LARKS

the rare ecstacy song. The bird sometimes sings from a fence post, a sage bush, or even from a hummock on the ground, but usually the impulse of song takes him up into the free air. Here at almost any hour of the day he may be seen poising at various heights, like a miniature hawk, and sending down tender words of greeting and cheer to the little wife who broods below.

It is, however, at the sacred hour of sunset that the soul of the heavenly singer takes wing for its ethereal abode. The sun is just sinking; the faithful spouse has settled herself to her gentle task for the night; and the bird-man has lain down in the shadow of the fence to gaze at the sky. The bird gives himself to the buoyant influences of the trembling air and mounts aloft by easy gradations. As he rises he swings round in a wide, loose circle, singing

softly the while. At the end of every little height he pauses and hovers and sends down the full voiced song. Up and up he goes, the song becoming tenderer, sweeter, more refined and subtly suggestive of all a bird may seek in the lofty blue. As he fades from the unaided sight I train my glasses on him and still witness the heavenward spirals. I lower the glasses. Ah! I have lost him now! Still there float down to us, the enraptured wife and me, those most ethereal strains, sublimated past all taint of earth, beatific, elysian. Ah! surely, we have lost him! He has gone to join the angels. "Chirriquita, on the nest, we have lost him." "Never fear," she answers; "Hark!" Stronger grows the dainty music once again. Stronger! Stronger! Dropping out of the boundless darkening blue, still by easy flights, a song for every step of Jacob's ladder, our messenger is coming down. But the ladder does not rest on earth. When about two hundred feet high the singer suddenly folds his wings and drops like a plummet to the ground. Within the last dozen feet he checks himself and lights gracefully near his nest. The bird-man steals softly away to dream of love and God, and to waken on the morrow of earth, refreshed.

The Columbian Horned Lark enjoys a wide distribution thruout eastern Washington during the nesting season, the only requirement of the bird being open country. The convenience of water is no object, and the bird favors the undifferentiated wastes of sage, rather than the cultivated fields. Elevated situations are especially attractive, and thousands of these Horned Larks nest along barren, wind-swept ridges and on the smaller mountains where no other species can be found.

No. 89.

PACIFIC HORNED LARK.

A. O. U. No. 474 g. *Otocoris alpestris strigata* Henshaw.

Synonym.—STREAKED HORNED LARK.

Description.—Similar to *O. alpestris* but darker and much smaller, above streaked broadly with black and tinged with buffy; nape, rump and bend of wing more rufescent; underparts usually more or less suffused with yellowish. Adult female more strongly and handsomely marked than that of any other form. Length of adult male (skins) 5.98 (52); wing 3.85 (98); tail 2.59 (65.8); bill .44 (11.3); tarsus .82 (20.8).

Recognition Marks.—As in preceding; smaller, darker and more yellow than other local forms.

Nesting.—*Nest* and *eggs* as in preceding. *Season*: second week in May, second week in June; two broods.

General Range.—Breeding in Pacific Coast district of Oregon, Washington

and British Columbia; "migrating to eastern Oregon and Washington, and northern California (Red Bluff; San Francisco)" (Ridgway).

Range in Washington.—Found breeding only on prairies west of Cascades, therefore chiefly confined to Pierce, Thurston and Chehalis Counties; said to winter on East-side.

Migrations.—*Spring*: last week in February; Tacoma, February 25, 1905, February 10, 1908.

Authorities.—*Emmophila cornuta* Boie, **Baird**, Rep. Pac. R. R. Surv., IX, 1858, 494, 495. (T). C&S. 1^a. Ra. B.

Specimens.—(U. of W.) Prov. B.

THE prairies of Pierce, Thurston, and Chehalis Counties, so often referred to in these pages, are of comparatively recent formation—mere gravel beds leveled off by the action of a retreating sea—and so thoroly washed thru portions of their area as to be capable of supporting little else than a carpet of moss. The wanton recklessness of the Pacific Horned Larks, which inhabit these open stretches, is really but one degree removed from the modesty of their more fortunate kinfolk across the Cascades. It is modesty without opportunity; and that easily becomes shamelessness. For here the ground is of an uncompromising green, and the "cover," afforded by slight depressions in the moss, is usually unworthy of the name.

The perfection of green barrenness was attained in the golf-links of South Tacoma, before they were surrendered to the demands of the growing city. Yet this was the very place where the Horned Larks appeared to the best advantage. Returning, as they did, about the 25th of February, in good seasons, they disported themselves like mad Pixies for a month or so, engaging in amorous pursuit and frequent song-flight; until in some way, late in April, domestic order began to emerge from the chaos of rival claims, and little homes dotted the prairie, where belted squires and red-jacketed ladies pursued the twinkling gutta-percha. The conflict of interests, avian and human, was sometimes disastrous to the birds. Mr. Bowles records three instances in which Larks were killed by flying golf balls; and another gentleman, himself a devotee of the game, tells me he once saw a bird struck dead in mid-air.

By the spring of 1906 matters had gone from bad to worse. The golf-links became a sort of common, despairingly resorted to by a few enthusiasts and a motley laity. The northwest portion of the section was staked out into lots, and the whole area was criss-crossed by roads and paths, whereby workmen, school-boys and delivery wagons hastened to and fro. Then it became the special pasture of a band of fifty cows, the lean kind of Pharaoh's dream multiplied by seven; and to the terrors of two hundred heedless hoofs was later added a flock of sheep, being fattened for sacrifice at a neighboring slaughter-house. This common was also a favorite romping ground for children, while dogs simply went crazy upon it. I saw one rabid beast in a

delirium of unfettered bliss do off about six miles in twice as many minutes, with a Horned Lark, flying low, as the invariable object of his chase. When to such conditions as these was added the scantiness of cover, one marveled indeed that the daffy Horned Lark still persisted upon his ancient heritage.

Yet on the 11th of April (the earliest record by far), in the barest of it, we marked a deep rounded cavity which Mr. Bowles declared belonged to the Streaked Horned Lark. Returning on the 27th, we found that the hole in the ground had become a bump instead. The bird, grown callous amid the impending evils, or else frankly intending to warn off trespassers, had filled the cavity full to overflowing, and had erected upon its site a monumental pile visible at a hundred yards. So zealous had the bird's efforts been that the crest of the nest stuck up two and a half inches above the close-cropped landscape, and the bottom of the nest was above the ground. This creation was quite ten inches across, while it included upon its skirts bits



THE NEST ON THE GOLD LINKS

of sod, cow-chips and pebbles,—a motley array, possibly designed to distract attention from the dun-colored eggs which the nest contained. The most lavish display of this sort of brumagem marked a runway of approach, offset by a corresponding depression upon the other side. The nest was composed chiefly of dried grasses and weed-stalks with soft dead leaves, and was lined, not very carefully, with grass, dried leaves, and a single white chicken-feather.^a

^a A small amount of this material was also used for the construction of the nest on the Gold Links.

Once the attention of the oölogist was directed to this structure, it rose from the plain like a pyramid of Cheops before his strained anxieties. It was torture to have to leave it for half an hour. How could that school-boy pass it twenty yards and not see it! Then, when I returned to reconnoître, the dear cattle were just being turned loose for the morning, and they, forsooth, must straggle past it. At the end of another hour, unable longer to endure the suspense, I returned to perform the last offices. The band of sheep was ~~not~~ then, and they were drifting so perilously close, that I ran the last hundred yards to head them off, and none too soon. Yet that precious monument of simplicity held three eggs, unharmed until the advent of the man, who wrought the ruin surely, in the name of—Science(?). Consistency, thou art a jewel found in no egg-collector's cabinet!

The nest of the Pacific Horned Lark is not often concealed, but usually does not more than fill the hollow of some cavity, natural or artificial. Wheel-rut, a footprint of horse or cow, a cavity left by an upturned stone, or, as in one instance, the bottom of an unused golf-hole. The only attempt at concealment noted was where the nest had been placed under the fold of a large strip of tar paper.



FIGURE 1. NEST OF THE PACIFIC HORNED LARK, WITH THREE EGGS.

had become tightly plastered to the ground.

In spite of the comparatively mild weather prevailing in April, eggs are often laid before the second week in May, and a second set is deposited about the second week in June. The number of eggs in a set varies from two to four, three being most commonly found. In color the ground is grayish white, while dots of greenish gray or reddish gray are now gathered in a heavy wreath about the larger end, and now regularly distributed over the entire surface—sometimes so heavily as to obscure the ground. The eggs are often very perceptibly glossed and there is frequently a haunting greenish or yellowish tinge which diffuses itself over the whole—an atmosphere, as the artist would say. Variation in size runs from round to elongate oval, and measurements range from .93 x .60 to .81 x .58.

Horned Larks owe their preservation chiefly to the wariness of the female.

for she flushes at long distances. Either she will slip off quietly and sneak at thirty yards, or else flush straight at a hundred. When the nest is discovered she is quite as likely to ignore the intruder, and seldom ventures near enough to betray ownership. On the other hand, given patience and a pair of strong binoculars, "tracking" is not a difficult accomplishment.

No. 90.

AMERICAN PIPIT.

A. O. U. No. 697. *Anthus rubescens* (Tunstall).

Synonyms.—AMERICAN TITLARK. BROWN LARK. LOUISIANA PIPIT.

Description.—*Adult in spring:* Above soft and dark grayish brown with an olive shade; feathers of crown and back with darker centers; wings and tail dusky with paler edging, the pale tips of coverts forming two indistinct bars; outer pair of tail-feathers extensively white; next pair white-tipped; superciliary line, eye-ring and underparts light grayish brown or buffy, the latter streaked with dusky except on middle of throat and lower belly, heavily on sides of throat and across breast, narrowly on lower breast and sides. *Winter plumage:* Above, browner; below, duller buffy; more broadly streaked on breast. Length 6.00-7.00 (152.4-177.8); wing 3.37 (85.6); tail 2.53 (64.3); bill .46 (11.7); tarsus .90 (22.9).

Recognition Marks.—Sparrow size; brown above; buffy or brownish with dusky spots below; best known by *tlip-yip* notes repeated when rising from ground or flying overhead.

Nesting.—*Nest:* at high altitudes, a thick-walled structure of grasses and moss set into deep excavation in sloping hillside or in cranny of cliff. *Eggs:* 4-6, usually 5, so heavily speckled and spotted with reddish or dark brown as almost entirely to obscure the whitish ground color. Often, except upon close examination, the effect is of a uniform chocolate-colored egg. Av. size .77 × .57 (19.6 × 14.5). *Season:* June 15-July 25; one brood.

General Range.—North America at large, breeding in the higher parts of the Rocky and Cascade Mountains and in sub-Arctic regions; wintering in the Gulf States, Mexico, and Central America. Accidental in Europe.

Range in Washington.—Abundant during migrations; common summer resident in Cascade Mountains above timber-line; winters sparingly west of mountains.

Migrations.—Nomadic; retires from mountains early in September; moves southward across State Oct. 15-Dec. 15; northward April 1-May 15.

Authorities.—? Townsend, Journ. Ac. Nat. Sci., Phila., VIII., 1839, 154 (Columbia River). *Anthus ludovicianus*, Licht. **Baird**, Rep. Pac. R. R. Surv. IX, pt. II., 1858, p. 233. T. C&S. I., Rh. D., Sr. Ra. D., J. B. E.

Specimens.—U. of W. P., Prov. B. E.

THE American Pipit does not sustain the habitual dignity of the boreal breed. He is no clown, indeed, like our Chat, nor does he quite belong to the

awkward squad with young Blackbirds; a trim form and a natty suit often save him from well merited derision, but all close observers will agree that there is a screw loose in his make-up somewhere. The whole Pipit race seems to be struggling under a strange inhibitory spell, cast upon some ancestor, perhaps, by one knows not what art of nodding heather bells or potency of subtly distilled Arctic moonshine. As the flock comes straggling down from the northland they utter unceasing *yips* of mild astonishment and self-reproach at their apparent inability to decide what to do next. Their indecision is especially exasperating as one rides along a trail which is closely flanked by a primitive rail fence, as I have often done in Okanogan County. One starts up ahead of you and thinks he will settle on the top rail and watch you go by. As his feet near the rail he decides he won't, after all, but that he will go a few feet farther before alighting. If he actually does alight he instantly tumbles off with a startled *yip*, as tho the rail were hot and he had burnt his toes. Then he tries a post with no better success, until you get disgusted with such silly vacillation and inane yipping, and clap spurs to your horse, resolved to escape the annoyance of having to follow such dubious fortunes.

In social flight the Pipits straggle out far apart, so as to allow plenty of room for their chronic St. Vitus's dance to jerk them hither or thither or up or down, without clashing with their fellows. Only a small percentage of those which annually traverse the State fly low enough to be readily seen; but when they do they are jolting along over the landscape and complaining at every other step. The note is best rendered *flip-yip*, less accurately *pip-it* (whence of course the name); and a shower of these petulant sounds comes spattering down out of the sky when the birds themselves are nearly or quite invisible.

The fall migrations of this species appear to have a compound character. Birds which make their appearance early in September are likely to quarter themselves in a given locality for several weeks at a time, tho whether these represent the first refugees from the high North, or mark the practical retreat of our own mountaineers, we cannot tell. Late comers pass thru more rapidly, and the main host clears by late October, but stragglers may be found in any open lowland situation until late November. They are especially partial to prairies, close-cropped pastures, the gravelly shores and bars of rivers, lakes and ponds, and the shingle of sea-beaches. At Semiahmoo the great ricks of barnacle-covered piles, which are annually corded on shore at the close of the fishing season, are regarded in the light of a Pipit hotel. The birds not only shelter among the timbers, but, after the fashion of Sandpipers, glean busily from their surfaces where the marine creatures, thru exposure to the air, are dying a fragrant death.

The return movement of spring sets in early, and the main flight is more

direct. But here there is suspicion of desultory wintering on the one hand (I have a record of forty birds seen on the Nisqually Flats, Feb. 10, 1906; and Fannin says they sometimes winter on Vancouver Island) and there is always a small percentage of loiterers who linger into May. Spring flocks may be looked for in freshly-plowed fields, where they feed attentively, often in absolute silence, moving about with "graceful, gliding walk, tilting the body and wagging the tail at each step, much in the manner of a *Sciurus*.'

Pipits are boreal breeders; but inasmuch as our own superb Alps claim kinship with the Arctic, there is no more favorable spot to study the nesting of the Pipits than upon the Cascades of northern Washington. At home the Pipit is a very different creature from the straggler of the long trail. On his native heather, surrounded by dwarfed fir trees, melting snow-fields, and splendid vistas of peak and cloud, he knows exactly what he wants and is quite capable of flying in a straight line.

All is bustle and stir along Ptarmigan Ridge,—the transverse rock-rib of Cascade Pass which divides the waters of Stehekin, Chelan, and the Columbia from those of the Cascade, Skagit, and Puget Sound.

The season is late, June 23, 1906, and the snows have only just released the ridge at 6000 feet elevation. Slate-colored Sparrows are carolling tenderly from the thickets of stunted fir. Sierra Hermit Thrushes, those minstrels of heaven, flit elusively from clump to clump or pause to rehearse from their depths some spiritual strain. *Leucostictes* look in upon the scene in passing, but they hasten at a prudent thought to their loftier ramparts. The real



OUR LADY OF THE SNOWS
A CHARACTERISTIC SUMMER HAUNT OF THE PIPIT

busybodies of the place are the Pipits. Females, lisping suspiciously, hurry to and fro, discussing locations, matching straws, playfully rebuking overbold swains, and hastily gulping insects on the side. The male birds hover about their mates solicitously—never helping, of course—or else sing lustily from prominent knolls and rocks.

The Pipit song in many of its phases is strikingly like that of the Rock Wren (*Salpinctes obsoletus*). It has the same vivacity and ringing quality, tho perhaps less power, and the similarity extends to the very phrasing. An alarm note runs *pichoo pichoo pichoo*, given six or seven times, rapidly and emphatically; while another, *wee iich, wee iich, wee iich*, is rendered, unless my eyes deceive me, with the same springing motion which characterizes the Wren. An ecstasy song of courting time (heard on Mount Rainier) runs *twiss twiss twiss twiss (ad lib.)*, uttered as rapidly as the syllables may be said. It is delivered as the bird describes great slow circles in mid-air; and when the singer is exhausted by his efforts, he falls like a spent rocket to the ground.

For all this activity, however, the nests are hard to find. Finally, as we keep ascending the ridge, bare save for occasional patches of snow in the hollows, Jack spies an old nest, last year's of course, in the recess of a soil tussock, completely overarched by earth. The secret is out, and we can search with more intelligence now. Soon I flush a female at her task of incubation. She has been digging out a pocket, or cave, in a moist bank which the snow had set free not above three days before. The earth removed from the interior is piled up for the lower rim, or wall, and a few rootlets, doubtless those secured in the process of excavation, have been culled out and laid horizontally along the edge of the dirt. The hole is about as large as my double fists, and the nest, when completed, evidently cannot be injured by falling snow.

In July of the following year, work was carried on in the Upper Horse-shoe Basin, a few miles further north. The song period was evidently past, but a nest of five eggs slightly incubated, was taken from a heather slope on the 20th of the month. The sitting bird flushed from under the beating stick, but only after I had passed.

On the 17th, a venturesome climb over the rock-wall which fronts the glacier of the Upper Basin, had yielded only a last year's *Leucosticte's* nest. As I was nearly down the cliff and breathing easier, a Pipit flew unannounced from a spur of the cliff upon which I was standing to the one beyond. Evidently she had heard the call of her mate, for the instant she lighted upon the cliff he was near her. But budge not a foot would he; whether he was suspicious or only exacting, one could not quite tell. At any rate he kept giving vent to a ringing metallic note of apprehension. The female coaxed with fluttering wings, and moved slowly forward as she did so, finally securing the worm from her reluctant lord, when—whisk! she was back again and out

of sight around the cliff on which I stood. I hastened forward to the furthest outstanding point which gave a partial view of the wall's face. No bird was in sight. Then I tossed pebbles against the cliff-side, and from beneath the second summons fluttered the frightened Pipit. Five beautiful eggs, of a warm weathered oak, rather than "mahogany" shade, lay in a niche of rock. A tussock of grass clung just below, and a dwarf shrub afforded a touch of drapery above; while from the outstretched hand a flint-flake might have fallen clean of the wall to the ice, a hundred feet below. The male bird continued his outcries from the distant cliff, but the female at no time reappeared.

With the advance of summer, the Pipits lead their broods about the disrobed peaks, even to the very summits, as do the noble *Leucostictes*. Knowing this, we may readily excuse any little eccentricities which appear in our friends during the duller seasons. The Pipit has redeemed himself.

No. 91.

TOWNSEND'S SOLITAIRE.

A. O. U. No. 754. *Myadestes townsendi* (Aud.).

Synonyms.—TOWNSEND'S FLYCATCHING THRUSH. TOWNSEND'S THRUSH. TOWNSEND'S FLYCATCHER.

Description.—*Adults*: General color smoky gray, lighter below, bleaching on throat, lower belly and under tail-coverts; a prominent white orbital ring; wings and tail dusky; wing quills crossed by extensive tawny area originating at base of innermost secondary and passing obliquely backward; this appears in the closed wing as a spot at the base of the exposed primaries but does not reach nearer the edge of the wing than the fifth or sixth primary; another obscure tawny or whitish patch formed by subterminal edging on outer webs of seventh and eighth (sometimes ninth) primaries; greater coverts and tertials tipped with white of varying prominence; a blotch of white on each side of tail involving distal third of half of outermost rectrix, tip of second and sometimes tip of third. Bill and feet black; irides brown. *Young* birds are heavily spotted with buff above and below (showing thereby Turdine affinities),—above, each feather has a single large spot (rhomboidal in some, heart-shaped in others) of buff, centrally, and is edged with blackish, thus producing a scaled appearance; below, the ground color is a pale buff or buffy gray with blackish edgings to feathers. Length about 8.00 (203.2); wing 4.60 (117); tail 4.05 (103); bill .49 (12.4); tarsus .79 (20).

Recognition Marks.—Chewink size; brownish gray coloration with spots of white (or pale tawny) on tail and wings. No black, as compared with a Shrike.

Nesting.—*Nest* in hollow under bank, cranny or rock wall or in upturned roots of tree, of sticks, coarse weeds and trash, lined with rootlets. *Eggs*: 4, grayish white spotted with pale brown, chiefly about larger end. Av. size, .96 x .70 (24.4 x 17.8). *Season*: May or June; one brood.

General Range.—Western North America, breeding chiefly in mountainous districts, from northwestern Mexico to Alaska and Yukon Territory, wintering

irregularly from British Columbia (Sumas) southward, straggling into Mississippi Valley during migrations.

Range in Washington.—Not uncommon spring and fall migrant throat in the State, summer resident in the mountains to the limit of trees and elsewhere irregularly to sea level; partially resident in winter west of the Cascade Mountains.

Authorities.—*Ptiliogonys townsendi*, Townsend, Narrative, 1839, p. 338. *Myiadestes townsendii* Baird, Rep. Pac. R. R. Surv. IX, 1858, 321. T. C&S, D^o. Ra. J. B. E.

Specimens.—U. of W. P^o. Prov. B. BN. E.

"OF this singular bird I know nothing but that it was shot by my friend, Captain W. Brothie, of the Honorable Hudson's Bay Company, in a pine forest near Fort George, (Astoria). It was the only specimen seen." In these words J. K. Townsend, the pioneer ornithologist of the Pacific Northwest, records^a the taking of the first example of this species known to science.

The bird thus presented as a conjectural native of Washington, has long been a puzzle to naturalists. It has been called Flycatcher, Thrush, and a combination of the two; but the name Solitaire seems to express both our noncommittal attitude toward the subject, and the demure independence with which the bird itself proceeds to mind its own affairs. Barring the matter of structure, which the scientists have now pretty well thrashed out, the bird is everything by turns. He is Flycatcher in that he delights to sit quietly on exposed limbs and watch for passing insects. These he meets in mid-air and bags with an emphatic snap of the mandibles. He is a Shrike in appearance and manner, when he takes up a station on a fence-post and studies the ground intently. When its prey is sighted at distances varying from ten to thirty feet, it dives directly to the spot, lights, snatches, and swallows, in an instant; or, if the catch is unmanageable, it returns to its post to thrash and kill and swallow at leisure. During this pouncing foray, the display of white in the Solitaire's tail reminds one of the Lark Sparrow. Like the silly Cedar-bird, the Solitaire gorges itself on fruit and berries in season. Like a Thrush, when the mood is on, the Solitaire skulks in the thickets or woodsy depths, and flies at the suggestion of approach. Upon alighting it stands quietly, in expectation that the eye of the beholder will thus lose sight of its ghostly tints among the interlacing shadows.

And so one might go on comparing indefinitely, but the bird is entitled to shine in its own light. The Solitaire is *sui generis*—no doubt of that. As soon as we establish for it a certain line of conduct, the bird does something else. We banish it to the mountains for the nesting season—a pair nests in a rail-

^a Narrative of a Journey Across the Rocky Mountains to the Columbia River, etc., by John K. Townsend (1839), p. 339. Townsend's "Catalogue of birds found in the territory of the Oregon," which appeared in this work, pp. 331-336, omits the distinction of being the first formal list of this north-western region. It contains 268 titles, but the naturalist included in it mention of many species encountered by him in his passage of the Rocky Mountains, and he does not, of course, distinguish between the regions lying north and south of the Columbia River. Of the total number recorded, therefore, Washington cannot possibly be entitled to above 268 species, and the list has little value in establishing the status of a bird as a resident of Washington.

road cut near Renton, altitude 200 feet. We describe to our friends the beauty of its song—they go to its sanctuaries and the bird is silent. A bird of such dainty mould should winter in the South. It does,—at times. It also winters at Sumas on our northern border. This poet of the solitudes, he should avoid the haunts of men. He does, usually. But another time he may be seen hopping from bush to log in a suburban swamp, or moping under the edge of a new sidewalk. Indeed, I once saw a Solitaire flutter up from under a passenger coach, as it lay in station. He had happened to spy some bread crumbs and there was nothing to hinder save the conductor's brisk "all aboard." Surely such a bundle of contradictions you never did see—and all belied by an expression of lamb-like artlessness and *dolce far niente*, which would do credit to a rag-doll.

All observers testify to the vocal powers of the Solitaire, and some are most extravagant in the bird's praises. My own notes are very meager. A song heard on Church Mountain, in Whatcom County, May 12, 1905, is characterized as "a dulcet strain of varied notes. It reminds one strongly of the Sage Thrasher, but it is somewhat less impetuous." In view of this meagerness, I venture to quote at length two older accounts, now hidden away in volumes not easily accessible. Dr. J. S. Newberry first encountered the Solitaire in the cañon of the Mptolyas River, at the base of Mount Jefferson (Or.), and declared its song to be full, rich, and melodious, like that of a *Mimus*^a



TOWNSEND'S SOLITAIRE.

a. Rep. Pac. R. R. Surv., Vol. VI., 1857, p. 82.

"We followed down the river in the bottom of the cañon; all day the gorge was filled with a chorus of sweet sounds from hundreds and thousands of these birds, which from their monotonous color, and their habit of sitting on the branch of a tree projecting into the void above the stream, or hanging from some beetling crag, and flying out in narrow circles after insects precisely in the manner of the Flycatchers I was disposed to associate with them.

"Two days afterward in the cañon of Psuc-see-que Creek, of which the terraced banks were sparsely set with low trees of the western cedar (*J. occidentalis*), I found these birds numerous. * * * With the first dawn of day they began their songs, and at sunrise the valley was perfectly vocal with their notes. Never, anywhere, have I heard a more delightful chorus of bird music. Their song is not greatly varied, but all the notes are particularly clear and sweet, and the strain of pure gushing melody is as spontaneous and inspiring as that of the Song Sparrow. At this time, September 30, these birds were feeding on the berries of the cedar; they were very shy, and could only be obtained by lying concealed in the vicinity of the trees which they frequented."

Mr. T. M. Trippe, speaking for the Clear Creek Cañon in Colorado, says²: "In summer and fall its voice is rarely heard; but as winter comes on, and the woods are well-nigh deserted by all save a few Titmice and Nuthatches, it begins to utter occasionally a single bell-like note that can be heard at a great distance. The bird is now very shy; and the author of the clear, loud call, that I heard nearly every morning from the valley of Clear Creek, was long a mystery to me. Toward the middle and latter part of winter, as the snow begins to fall, the Flycatching Thrush delights to sing, choosing for its rostrum a pine tree in some elevated position, high up above the valleys; and not all the fields and groves, and hills and valleys of the Eastern States, can boast a more exquisite song; a song in which the notes of the Purple Finch, the Wood Thrush, and the Winter Wren are blended into a silvery cascade of melody, that ripples and dances down the mountain sides as clear and sparkling as the mountain brook, filling the woods and valleys with ringing music. At first it sings only on bright clear mornings; but once fairly in the mood, it sings at all hours and during the most inclement weather. Often while travelling over the narrow, winding mountain roads, toward the close of winter, I have been overtaken and half-blinded by sudden, furious storms of wind and snow, and compelled to seek the nearest tree or projecting rock for shelter. In such situations I have frequently listened to the song of this bird, and forgot the cold and wet in its enjoyment. Toward spring, as soon as the other birds begin to sing, it becomes silent as tho disdainful of joining the common chorus, and commences building its nest in May, earlier than almost any other bird. During this season it deserts the valleys, and confines itself to partially wooded hill-tops."

2. Coates, *Birds of the Northwest* (1874), pp. 95, 96.

No. 92.

WILLOW THRUSH.

A. O. U. No. 556 a. *Hylocichla fuscescens salicicola* Ridgway.**Synonym.**—WESTERN WILSON THRUSH.

Description.—*Adult*: Above, dull tawny-brown, uniform; wing-quills shading to brownish fuscous on inner webs; below white, the throat, except in the upper middle, and the breast, tinged with cream-buff, and spotted narrowly and sparingly with wedge-shaped marks of the color of the back; sides and flanks more or less tinged with brownish gray; sides of head buffy-tinged, with mixed brown, save on whitish lores; bill dark above, light below; feet light brown. Adult male, length 7.25-7.75 (184.2-196.9); wing 3.93 (100); tail 2.95 (75); bill .55 (14); tarsus 1.18 (30).

Recognition Marks.—Sparrow to Chewink size; dull cinnamon brown above; breast buffy, *lightly* spotted.

Nesting.—*Nest*: of leaves, bark-strips, weed-stems and trash, lined with rootlets; placed at height of two or three feet in thickets or, rarely, on ground. *Eggs*: 3-5, plain greenish blue, not unlike those of the Robin. Av. size, .90 x .65 (22.8 x 16.5). *Season*: first or second week in June; one brood.

General Range.—Western interior districts of United States and Canada; breeding from North Dakota and Manitoba west to interior of British Columbia and southward to Nevada, Utah and Colorado; southward during migrations thru Arizona, etc., to Brazil, also thru the Mississippi Valley and, casually, eastward.

Range in Washington.—Summer resident in the hilly districts of north-western Washington.—Blue Mountains(?).

Authorities.—Howe, Auk, XVII. Jan. 1900, p. 19 (Spokane). T(?). J.

Specimens.—Prov.

THE Willow Thrush shares with its even more retiring cousin, the Olive-back, the forests of the northwestern portion of the State. Here it may be found in the seclusion of spring draws and alder bottoms, or in the miscellaneous cover which lines the banks of the larger streams. It is confined almost entirely to the vicinity of water, and spends much of its time on the damp ground poking among the fallen leaves and searching the nooks and corners of tree-roots. Since the bird is but a flitting shade, one cannot easily determine its color-pattern, and must learn rather the range and quality of its notes. The bird *is*, rather than *has*, a voice, an elusive voice, a weird and wonderful voice. And only after one has heard the song, with its reverberant, sweet thunder, and its exquisitely diminishing cadences, as it wells up at eventide from some low thicket, may one be said to know the Willow Thrush.

For the most part the bird betrays interest in your movements by a subdued *yeavi*, a note of complaint and admonition, variously likened to a grunt, a bleat, or a nasal interjection. Not infrequently this becomes a clearly

whistled *ze-eh-er*; and this, in turn, is varied and strengthened to *ze-er-u*, or *U-ery*, whence the common name of the typical form, *H. fuscescens*, in the East. The song proper consists of six or seven of these *ze-er-ys*, rolled out with a rich and inimitable brogue. The notes vibrate and resound, and fill the air so full of music that one is led to suspect the multiple character of each. The bird is really striking chords, and the sounding strings still vibrate when the

next is struck. There is, moreover, in the whole performance, a musical crescendo coupled with a successive lowering of pitch, which is fairly ravishing in its impression of mystery and power.

The distribution of this species is as yet imperfectly made out. Having made its acquaintance at Spokane and along the valley of the Pend d'Oreille, we were able to recognize it later at Chelan and Stehekin, the latter unquestionably the westernmost record of its occurrence in the United States. Whether it may also extend further south along the east front of the Cascades, remains to be seen.

A nest before me was taken by Mr. Fred S. Merrill, in Spokane. It was placed in the crotch of an alder at a height of two feet, and contained, on the ninth day of June, four slightly incubated eggs. The nest is a rather loosely constructed affair of bark-strips, dead leaves, coarse grasses, shavings, leaf-stems, etc., and has a careless lining of dessicated leaves and broken grasses. The matrix of mud, or leaf-mold, which gives strength and consistency to the

W. L. Gage.

THE EGGS OF THE WILLOW THRUSH.

nests of certain other thrushes, is conspicuously lacking in this one. The brooding hollow is only three inches from brim to brim, by one and three-quarters in depth. The eggs are in every way miniature Robins', being without spots, and representing only three-fifths or two-thirds the bulk of those of the larger bird.

No. 93.

RUSSET-BACKED THRUSH.

A. O. U. No. 758. *Hylocichla ustulata* (Nutt.).

Synonym.—"WOOD THRUSH" (name properly restricted to *H. mustelina* of the East).

Description.—*Adults*: Above olive-brown, substantially uniform; a conspicuous orbital ring of pale buff; sides of head buffy mingled or streaked with olive-brown; chin, throat and chest buff (or lightening to buffy white toward chin); sides of throat and entire chest with triangular marks of deep olive-brown, smaller and narrower on throat, larger and broader (sector-shaped) posteriorly; breast, especially on sides, transversely spotted with light brown; sides and flanks heavily marked with brownish; remaining underparts white. Bill blackish, paling basally on mandible; feet and legs brown; iris brown. *Winter* specimens are brighter, more deeply tinged with buff before and with under tail-coverts buffy. *Young birds* are more or less marked and streaked with buffy and tawny above and the markings of underparts are mostly transverse. Length 6.50-7.50 (165.1-190.5); wing 3.83 (.97); tail 2.87 (.73); bill .54 (.13.7); tarsus 1.10 (.28).

Recognition Marks.—Sparrow size; uniform olive-brown above; heavy spotting and buffy wash on chest; sides of head and eye-ring buffy; brown above as compared with *H. u. stevensonii*.

Nesting.—*Nest*: of bark-strips, moss and grasses, with a heavy inner mat or mould of dead leaves, lined with rootlets and fine grasses; placed usually at moderate heights in bushes or saplings of thickets, sometimes 30-60 feet high in trees. *Eggs*: 3-5, usually 4, greenish blue or dull grayish blue dotted and spotted, rather sparingly, with various shades of brown. Av. size, .93 x .67 (23.6 x 17). *Season*: June, July; one or two broods.

General Range.—Pacific coast district from southern California to Alaska (Juneau), breeding thruout its range; south in winter thru Mexico to Central and northern South America.

Range in Washington.—Common summer resident and migrant west of the Cascade Mountains; probably overflows thru mountain passes to at least the eastern slopes of the Cascades.

Authorities.—*Turdus ustulatus* Nuttall, Man. Orn. U. S. and Canada, Land Birds, ed. 2, 1840, pp. VI, 830 (Columbia River). C&S, L¹, Rh. D¹, Kb. Ra.

Specimens.—U. of W, P¹ (?), Prov. B, BN, E.

ARTISTS of the later schools agree that shadows are not often black, as they have been conventionally represented for centuries. Their deepest color note is always that of the ground, or screen, which bears them. The Thrush, therefore, is the truest embodiment of woodland shade, for the shifting russets

of its upperparts melt and blend with the tints of fallen leaves, dun roots, and the shadows of tree-holes cast on the brown ashes of fallen comrades. Not content, either, with such protective guarantee, this gentle spirit clings to cover, and reveals itself only as a flitting shade and a haunting voice. Now and then a brown gleam does cross some open space in the forest, but the action is hasty and the necessity much regretted.

The Russet-backed Thrush is not much given to song, although on occasion the woodside may ring with the simple melody of its *wee loo wee loo wee loo wee loo wee loo wee loo*. Other notes are more notable and characteristic; and by these one may trace the bird's every move-



RUSSET-BACKED THRUSH.

O. B. Johnson in his "List of the Birds of the Willamette Valley, Oregon" (Am. Naturalist, p. 487) has made an excellent characterization of this song in "*Hollee, goo-dee, goo-dee,*

ment without recourse to sight. *Quit*, or *hwit*, is a soft whistled note of inquiry and greeting, by which the birds keep in constant touch with each other, and which they are nowise disinclined to use in conversations with strangers. *Hwootaylyochtyl* is the name which the Quillayute lad gives the bird, the first syllable being whistled rather than spoken, in imitation of the bird's note. At the friendly call the Thrush comes sidling over toward you thru the brush, until you feel that you could put your hand on it if you would; but the bird remains invisible, and says, *quit, quit*, with some asperity, if you disregard the *convenances*.

A longer call-note, of sharper quality, *qucce*, may be as readily imitated, altho its meaning in the bush is uncertain. The bird has also a spoken note, a sort of happy purring, which I call the *coordaddy* cry. In this the *daddy* notes are given in from one to six syllables, and are spoken "trippingly on the tongue."

Recalling again the *qucce* note, we are surprised to find that it is the commonest sound heard during migrations. At midnight when a solemn hush is over all besides, this weird note comes down from the sky at any height, from every angle, a greeting *en passant* from the voyageurs, the tenderest, the most pathetic, the most mysterious voice of Nature. There are a dozen variations of pitch and tone, *quéccé*, *qucc*, *kooo*, etc., but the theme is one, and the quality is that of the Russet-backed Thrush. Now it is incredible that any one species should so abound to the exclusion of all others, or that one alone should speak, while others flit by silently. Moreover, the intermittent utterance of a single bird proclaims the rate at which that bird is moving, and oftener argues for the passing of the smaller species, Warblers and the like. Repeated observation would make it appear certain that this *qucc* note is the common possession of many, perhaps of all species of migrant song birds, a sort of Esperanto for "Ho, Comrade!" by which the flying legions of the night are bound together in a great fellowship.

Much of the apparent difference in the call-notes of these night-birds is explained when we remember that they are reaching us from different angles. Thus, the *qucc* of a rapidly approaching bird is raised sharply and shortened, *quccé*; while the same voice, in passing, falls to a ghostly *kwoo*, at least a musical third below. It is, perhaps, needless to add that practiced lips may join this mystic chorus and hold delightful converse with these brothers of the air—may, indeed, provoke them to trebled utterance in passing.

But only the Russet-backed Thrush may repeat this cabalistic note, by day. He is the bugler in that greatest of all armies and he must needs keep in practice while on furlough.

Russet-backs are tardy migrants, seldom arriving before the first week in May; and they are off again for the Southland by the first week in September. Two instances are on record, however, of the bird's wintering here—

THE RUSSET-BACKED THRUSH.

abouts. On the 7th of March, 1891, several birds were "engaged in conversation" by the writer near Tacoma; and on the 22nd of January, 1907, two birds were encountered on the University grounds in Seattle. In both latter instance the birds would not disclose themselves, altho they passed half way around me in the thicket, uttering their characteristic and unmistakable notes.

In home building this Thrush makes no effort at nest concealment, trusting rather to the seclusion of its haunts. The materials which enter into the construction of the nest are themselves in a measure protective, especially in those numerous instances in which the exterior is composed en-

tirely of mud, or of other hard strips, and grasses are used; but the two things which give character to the nest of this Thrush are the mud cup, or matrix, of mud and leaf-mold, and the lining of dried leaf-skeletons. I have surprised a mother Russet at her task of cup-moulding, and verily her bib was as busy as that of any child making mud pies. For altho the beak serves for hod and shovel, the finishing touches, the actual moulding, must be accomplished by pressure of the bird's breast.

During a season's nesting in Clatsop, in the Moscow River, Baker, Clarke, & Co. I found a Brown located about a hundred sets of the Russet



MOTHER RUSSET AND HER BROOD.

ed Thrush, taking no account of nests in other stages of occupation. At a distance from the ground, nests varied from six inches to forty feet, altho a common tree foot elevation was about the average. Nests were found in the clefts, where they were supported by the interlacing of branches, or else

named places, nests might be set against the trunk on a horizontal limb, but were more often at some distance from it. The birds were very sensitive about molestation before eggs were laid, and would desert a nest in process of construction on the merest suspicion that a stranger had looked into it. After deposition, however, the mother Thrush was found to be very devoted to her charges, and great confidence was often engendered by carefully considered advances.

At Glacier, nest-building averaged to commence about the 25th of May, and the first eggs were found on the 1st of June. The last set was found July 15th. All nests examined in the earlier part of the season contained four eggs; those found later, presumably second efforts, never had more than three.

As a curious example of the use of the imagination on the part of early writers, take this from our venerated Cooper^a: "The eggs, unlike those of most thrushes, are white, spotted thickly with brown, and four or five in number." The brown spotting is all right and an unpigmented shell is not an impossibility, but deviations from the characteristic greenish blue of the ground-color have not since been reported.

No. 94.

OLIVE-BACKED THRUSH.

A. O. U. No. 758 a. **Hylocichla ustulata swainsonii** (Cab.).

Synonyms.—SWAINSON'S THRUSH. EASTERN OLIVE-BACK. ALMA'S THRUSH (*H. u. alma* Oberh., disallowed by A. O. U. Com.).

Description.—*Adults*: Similar to *H. ustulata* but grayer and more olivaceous; "color of upperparts varying from olive to grayish hair brown in summer, from deep olive to slightly brownish olive in winter"; ground color of underparts lighter buffy (yellowish buff or creamy buff); sides and flanks grayish—instead of brownish-olive. Size of last.

Recognition Marks.—As in preceding; grayer above, lighter buffy below.

Nesting.—*Nest* and *Eggs* indistinguishable from those of typical form, *H. ustulata*.

General Range.—North America in general except Pacific coast district south of Cross Sound and Lynn Canal; breeding from the mountainous districts of the United States (especially northerly) north to limit of trees; south in winter thruout Mexico and Central America to Peru, Bolivia, etc.

Range in Washington.—Imperfectly made out as regards that of *H. ustulata*. Found breeding in the valley of the Stehekin hence presumably summer resident in timbered districts of eastern Washington.

Authorities.—Bowles and Dawson, Auk, Vol. XXV, Oct. 1908, p. 483.

Specimens.—Prov. B.

a. Rep. Pac. R. R. Surv., Vol. XII., Book II., 1866, p. 171.

THE more open woods and more abundant suns of eastern Washington effect that reduction of color in the "burnt" Thrush, which henceforth characterizes the species clear thru to the Atlantic. It would be idle to trace in detail all accompanying changes of manner and habit, but we can hardly fail to note the improved quality of the Olive-back's song. This is most nearly comparable to that of the Willow Thrush and has something of the same rolling vibrant quality. It is, however, less prolonged and less vehement. It may or may not retain the liquid t's, but it discards outright the rich r's, which the Veery rolls under his tongue like sweet morsels; and the pitch of the whole rises slightly, perhaps a musical third, as the volume of sound diminishes toward the end: *He-e-o, we-e-o, we-o we-o weee*. A song heard some years ago at the head of Lake Chelan, *weeloo weeloo weelooee looce*, seemed to have all the music of perfected *steinsonii* in it, yet it was not till the season of 1908 that Mr. Bowles established the fact of the Olive-back's presence and the Russet-back's absence from the Stehekin Valley. On the other hand, Ridgway finds that both forms sometimes occur together, even during the breeding season; so we are not yet prepared to make generalizations as to the relative distribution of these birds in Washington.

No. 95.

ALASKA HERMIT THRUSH.

A. O. U. No. 759. *Hylocichla guttata* (Pallas).

Synonym.—KADIAK DWARF THRUSH (Ridgw.).

Description.—*Adult*: Upperparts plain grayish brown (hair brown to near broccoli brown) changing on rumps to dull cinnamon-brown of upper tail-coverts and tail; a prominent whitish orbital ring; sides of head mingled grayish brown and dull whitish; underparts dull white, clear only on belly,—throat and breast tinged with pale creamy buff; sides and flanks washed with pale grayish brown; throat in confluent chain on side and lower throat, chest and upper breast—spotted with dusky or sooty, the spots narrow and wedge-shaped on lower throat, broadening and deepening on chest, fading and becoming rounded on breast. Bill drab brown paling on mandible basally; feet and legs brown; iris dark brown. *Winter* specimens are brighter and more strongly colored thruout. *Young birds* are streaked with buffy above and the spotting of underparts inclines to bars on breast and sides. Length 6.30-7.40 (160-188); wing 3.40 (88); tail 2.52 (64); bill .50 (12.7); tarsus 1.14 (29).

Recognition Marks.—Sparrow size; cinnamon of tail (and upper-coverts) contrasting more or less with duller brown of remaining upperparts.

Nesting.—Does not breed in Washington. *Nest* and *Eggs* as in *H. g. septuiesis*.

General Range.—Coast district of Alaska breeding northward and westward

from Cross Sound; southward in winter as far as Texas and western Mexico, migrating chiefly coastwise.

Range in Washington.—Spring and fall migrant west of the Cascades.

Migrations.—*Spring*: Tacoma, April 15, 1905 (J. H. Bowles). *Fall*: Seattle Sept. 21, 1907 (Jennie V. Getty).

Authorities.—Bowles and Dawson, Auk, XXV. Oct. 1908, p. 483.

Specimens.—P (Alaskan). Prov. B.

ABOUT all we can certify to, so far, is that there are two varieties of the Hermit Thrush which may be seen on Puget Sound during the migrations: a lighter and grayer form, presumably from northwestern Alaska; and a darker, more warmly-tinted bird, *H. g. nana*, which may or may not summer to some extent in western Washington. Specimens so far encountered in eastern Washington are probably *H. g. sequoiensis*, en route to or from their breeding haunts in the high Cascades; while if any are ever captured in the mountains of Stevens County, they will probably prove to be of the *H. g. auduboni* type, which prevails in the eastern portion of British Columbia.

No. 96.

SIERRA HERMIT THRUSH.

A. O. U. No. 759 part. *Hylocichla guttata sequoiensis* (Belding).

Synonyms.—WESTERN HERMIT THRUSH. CASCADE HERMIT THRUSH. MOUNTAIN HERMIT.

Description.—Similar in coloration to *H. guttata* but larger, paler and grayer. Adult male: wing 3.65 (92.8); tail 2.83 (71.8); bill .53 (13.5); tarsus 1.12 (28.4).

Recognition Marks.—As in *H. guttata*.

Nesting.—*Nest*: of bark-strips, grasses, leaves and moss, lined with fine rootlets, placed on ground in thickets or at moderate heights in fir trees. *Eggs*: 3 or 4, greenish blue unmarked—not certainly distinguishable from those of the Willow Thrush. *Av. size*, .85 x .65 (21.6 x 16.5). *Season*: June, July; one brood.

General Range.—Mountains of the Cascade-Sierra system and from Mt. Whitney north thru central British Columbia, etc., to the Yukon River; south in winter to Lower California, Sonora, etc.

Range in Washington.—Common summer resident in the Cascade Mountains—further distinction undetermined.

Authorities.—Dawson, Auk, Vol. XXV. Oct. 1908, p. 483.

Specimens.—D.

WHEN asked to name the best songster of Washington, I answer, unhesitatingly, the Hermit Thrush. It is not that the bird chooses for his home the icy slopes and stunted forests of the high Cascades, tho' that were evidence enough of a poetic nature. It is not for any marked vivacity, or personal charm of the singer, that we praise his song; the bird is gentle, shy, and unassuming, and it is only rarely that one may even see him. It is not that he excels in technique such conscious artists as the Catbird, the Thrasher, and the

Mockingbird; the mere comparison is odious. The song of the Hermit Thrush is a thing apart. It is sacred music, not secular. Having nothing of the dash and abandon of Wren or Ouzel, least of all the sportive mockery of the Long-tailed Chat, it is the pure offering of a shriven soul, holding acceptable converse with high heaven. No voice of solemn-pealing organ or cathedral choir at vespers ever hymns the parting day more fittingly than this appointed chorister of the eternal hills. Mounted on the chance of some low-crowned



SIERRA HERMIT THRUSH

fir tree, the bird looks calmly at the setting sun, and slowly phrases his worship in such dulcet tones, exalted, pure, serene, as must haunt the corridors of memory forever after.

You do not have to approve of the Hermit Thrush,—nor of Browning, nor of Shelley, nor of Keats. The writer once lost a subscription to "The Birds of Washington, Patrons' Edition, De Luxe, Limited to One Hundred Copies" and all that, you know, because he ventured to defend Browning. "No; I do



National Park.

From a Photograph Copyright, 1908, by W. L. Darr.

FOOT OF NISQUALLY GLACIER FROM GOVERNMENT ROAD.

A CHARACTERISTIC HAUNT OF THE SIERRA HERMIT THRUSH.

not want your bird-book." Quite right, Madame, it would have been a waste of money—for you. But I have heard the Hermit Thrush.

"Ah, did you once see Shelley, plain,
And did he stop and speak to you,
And did you speak to him again?
How strange it seems, and new!

"But you were living before that,
And also you are living after;
And the memory I started at—
My starting moves your laughter!

"I crossed a moor with a name of its own,
And a certain use in the world, no doubt,
Yet a hand's breadth of it shines alone
Mid the blank miles around about:

"For there I picked up on the heather,
And there I put inside my breast,
A moulted feather, an eagle feather!
Well, I forget the rest."

No. 97.

DWARF HERMIT THRUSH.

A. O. U. No. 759 c. *Hylocichla guttata nana* (Aud.).

Synonyms.—PACIFIC HERMIT THRUSH. SITKAN DWARF THRUSH (Ridgway).

Description.—"Similar to *H. g. guttata* but coloration darker and browner, the color of back, etc., more sepia brown, upper tail-coverts more russet, tail more chestnut, and spots on chest larger and darker" (Ridgway). Adult male: wing 3.42 (86.8); tail 2.58 (65.5); bill .48 (12.2); tarsus 1.13 (28.8).

Recognition Marks.—As in *H. guttata*.

Nesting.—As in *H. g. sequoiensis*.

General Range.—Pacific coast district, breeding from western Oregon (presumably) north to Cross Sound, Alaska; south in winter to Southwestern States.

Range in Washington.—Probably common but little known, during migrations. Presumably resident in summer west of the Cascades.

Authorities.—? *Turdus nannus* Audubon, Orn. Biog. V. 1839, 201 (Columbia R.) ? Townsend, Journ. Ac. Nat. Sci. Phila. VIII. 1839, 153 (Col. R.) **Belding**, L. B. P. D. 1890, p. 254 (Walla Walla, J. W. Williams, 1885).

Specimens.—U. of W. Prov. E.

AS one passes thru the woods in middle April while the vine maples are still leafless, and the forest floor is not yet fully recovered from the brownness of the rainy season, a moving shape, a little browner still, but scarcely outlined in the uncertain light, starts up from the ground with a low *chuck*, and pauses for a moment on a mossy log. Before you have made out definite characters, the bird flits to a branch a little higher up and more removed, to stand motionless for a minute or so, or else to chuckle softly with each twinkle of the ready wings. By following quietly one may put the bird to a dozen short flights without once driving it out of range; and in so doing he may learn that the tail is abruptly rufous in contrast with the olive-brown of the back, and that the breast is more boldly and distinctly spotted than is the case with the Russet-backed Thrush.

This bird will not tarry with us, unless it may choose to haunt the solitudes of the Olympics. In the vicinity of Sitka, however, Mr. J. Grinnell re-

ports the species as "very common everywhere, especially on the small wooded islands." ¹⁸⁸⁰

When disturbed in its nesting haunts the Hermit Thrush has a nasal scolding cry, not unlike that of the Oregon Towhee. This note lacks the emphasis of Towhee's, tho its dual character is still apparent—*Murrry* or *Murre*. But one forgets all trivial things as he listens to the angelic requiem of the Hermit at eventide. Not Orpheus in all his glory could match that,—for he was a pagan.

No. 98.

AMERICAN ROBIN.

A. O. U. No. 761. *Planesticus migratorius* (Linn.).

Synonym.—EASTERN ROBIN.

Description.—*Adult male*: Head black, interrupted by white of chin and white with black stripes of throat; eyelids and a supraloral spot white; tail blackish with white terminal spots on inner webs of outer pair of rectrices; wings dusky except on external edges; remaining upperparts grayish slate; below,—breast, sides, upper belly and lining of wings cinnamon-rufous; lower belly and crissum white, touched irregularly with slate; bill yellow with blackish tip; feet blackish with yellowish soles. *Adult female*: Similar to male, but duller; black of head veiled by brownish. *Adults in winter*: Upperparts tinged with brown, the rufous feathers, especially on belly, with white skirtings. *Immature*: Similar to adult, but head about the color of back; rufous of underparts paler or more ochraceous. *Very young birds* are black spotted, above and below. Length about 10.00 (254); wing 5.08 (129); tail 3.75 (95.3); bill .78 (19.8).

Recognition Marks.—"Robin" size; cinnamon-rufous breast; the "corners" of the tail conspicuously white-tipped, as distinguished from *P. m. propinquus*.

Nesting.—Does not breed in Washington. *Nest* and *eggs* as in next (sub) species, save that eggs 4 or 5, sometimes 6.

General Range.—Eastern and northern North America westward nearly to the Rocky Mountains and northward to valley of Kowak River in Alaska; breeds from the southern Alleghenies, Pennsylvania, Ohio, Iowa, etc., northward; winters in Gulf States; south irregularly across the Western States during migration.

Range in Washington.—An early spring (and late fall?) migrant, both sides of the Cascades. Winters sparingly on Puget Sound.

Authorities.—*Turdus migratorius* **Brewster**, B. N. O. C. VII., Oct. 1882, p. 227. B. E.

Specimens.—B. E.

a. Auk, Vol. XV., April, 1898, p. 130.

A SMALL proportion, not over one per cent, of the Robins which annually cross our borders have enough white in the "corners" of their tails to proclaim them true "Americans." The difference is striking and unmistakable, and we feel sure that we have here, not a chance variation, but an alien element, a slender stream of migration diverted from the accustomed channels of typical *P. migratorius*, and straggling down, or up, on the wrong side of the Rockies. When it is remembered that the American Robin winters in Florida and the Gulf States, and that its spring migrations take it as far west as the Kowak River, in Alaska, that is, due northwest from Atlanta, it is less surprising that the birds should occasionally bear west northwest instead, and so make Washington en route. It is almost certain that this is the case, for the wintering birds west of the Rockies and in Mexico are invariably of the western type, *propinquus*.

No. 99.

WESTERN ROBIN.

A. O. U. No. 761a. *Planesticus migratorius propinquus* (Ridgw.).

Description.—Similar to *P. migratorius*, but white on inner webs of outer rectrices much reduced or wanting; gray of upperparts paler and more olivaceous, more sharply contrasting with black of head; cinnamon-rufous of underparts averaging paler; wing, tail, and tarsus slightly longer. Length of males about 10.25 (200.3); wing 5.52 (140); tail 4.13 (105); bill .80 (20.3); tarsus 1.34 (34.1). Females slightly smaller.

Recognition Marks.—"Robin" size; cinnamon-rufous below—everyone knows the Robin—without white on "corners" of tail as distinguished from preceding.

Nesting.—*Nest*: a thick-walled but shapely bowl of mud (rarely felted vegetable fibers instead) set about with twigs, leaves, string and trash, and lined with fine grass-stems; placed anywhere in trees or variously, but usually at moderate heights. *Eggs*: 3 or 4, rarely 5; greenish blue, unmarked. Av. size 1.15 x .70 (20.2 x 20.1). *Season*: April 15-July 10; two broods.

General Range.—Western North America from the Rocky Mountains to the Pacific, north to limit of trees in coast forest district in Alaska; south thru highlands of Mexico and occasionally Guatemala; breeding nearly thruout its range.

Range in Washington.—Common summer resident and migrant thruout the State, more common in settled portions; rare in mountains save in vicinity of settlements; irregularly resident in winter, sometimes abundantly on Puget Sound.

Migrations.—*Spring*: West-side, last week in February; East-side, first or second week in March. *Fall*: October.

Authorities.—[Lewis and Clark, Hist. Ex. 1814 Ed. Biddle; Coues, Vol. II. p. 185.] *Turdus (planesticus) migratorius*, Linn, **Baird**, Rep. Pac. R. R. Surv. IX. pt. II. 1858, p. 219. (T.) C&S. L¹. Rh. D¹. Sr. Kb. Ra. D². Ss¹. Ss². Kk. J. B. E.

Specimens.—U. of W. P¹. Prov. BN. B. E.

THERE are, it may be, a thousand fruits, sweet, acid or spicy, which delight the palate of man, yet if we were forced to choose among them, not many of us would fail to reserve the apple. In like manner, we could perhaps least afford to spare our tried and trusted, old, familiar friend, the Robin. He is a staple.

Everybody knows Robin. He is part and parcel of springtime, chief herald, chief poet, and lord high reveller of that joyful season. It is a merry day when the first flock of Robins turns itself loose on the home landscape. There is great bustle and stir of activity. Some scurry about to note the changes wrought by winter, some wrestle with the early and unsophisticated worm, while others voice their gladness from the fence-post, the gable, the tree-top, anywhere. Everywhere are heard interjections of delight, squeechings and pipings of ardent souls, and no end of congratulations over the home-coming.

Robin has cast in his lot with ours, for better or for worse. Our lawns are his lawns, our shade-trees were set on purpose to hold his homely mud-cup, and he has undertaken with hearty good will the musical instruction of our children. He serves without pay—Oh, a cherry now and then, but what of that? The fruit-grower never had a more useful hired man; and it is written: "Thou shalt not muzzle the ox that treadeth out the corn." I wonder if we realize how much of life's good cheer and fond enspiriting we owe to this familiar bird.

Near the close of a burning day in the desert, we drew near to a little ranch where a bravery of green, supported by a windmill and a tiny trickle of water, defied the engulfing waste of sand and sage. It seemed to me that I



Taken in Oregon. Photo by W. L. Finley.

BACK FROM MARKET.

had never seen anything more pathetic than the stubborn faith of the man who had dreamed of rearing a home amidst such desolation. How could a man be happy here? and how dare he bring a wife and tender children to share such a forlorn hope? Why, the wilderness around had raised nothing but sage-brush and jack-rabbits for countless millenniums; but here in this tiny oasis were locust trees and poplars. And here, as the sun sank low in the West, a Robin burst into song. The nearest human neighbor was miles away, and the nearest timber further. Yet here was this home-loving Robin, this re-incarnation of childhood's friend, pouring out in the familiar cadence of old his thanksgiving for shelter and food, his praise for joy of life and gladness to the Almighty, who is Father of all. And then I understood.

The Robin's song in its common form is too well known to require particular description, and too truly music to lend itself well to syllabic imitation. It is a common thing, indeed, like the upturned mold and the air which fans it, but out of these come the varied greens which beautify the world; the



SUNSET AT THE ROBIN ROOS.

homely piping of the Robin has given birth to many a heaven-directed aspiration, and purged many a soul of guilty intent. Robin conceives many passages which are too high for him, and these he hums in audibly, or follows in silent thought, like a tenor with a cold. When the

theme reaches his compass again, he resumes, not where he left off but at the end of the unheard passage. It must be confessed, however reluctantly, that the song of the Western Robin is a little more subdued in character than that of the Eastern. The bird is a little less devoted to his art, and the total volume of sound yielded by any one chorus has never equalled, in my experience, that of a similar effort in the East.

When the Robin is much given to half-whispered notes and strains unusually tender, one may suspect the near presence of his fiancée. If you are

willing to waive the proprieties for a few moments you will hear low murmurs of affection and soft blandishments, which it would tax the art of a Crockett to reproduce. And again, nothing can exceed the sadness of a Robin's lament over a lost mate. All the virtues of the deceased are set forth in a coronach of surpassing woe, and the widower declares himself forever comfortless. It is not well, of course, to inquire too particularly as to the duration of this bereaved state—we are all human.

In spite of his fondness for human society, there are two periods of retirement in Robin's year. The first occurs in March and early April, and may be denominated the season of courtship. After the first ardent greeting of the home folks, Robins gather in loose companies and keep to the seclusion of the woods, following the sun from east to south and west, ransacking the roots of trees and the edges of standing water for food, and, above all, sketching in the matrimonial plans of the season. When Robins have become common about the streets and yards of village and town, partners have usually been selected, but there still remain for many of the cocks hard-contested battles before peaceful possession is assured. These are not sham fights either; a Robin will fight a hated rival, beak and claw, till he is either thoroly winded or killed outright.

In late July and August Robins again forsake their familiar haunts, and spend the moulting season in the woods, moving about like ghosts in great straggling, silent companies. When the moult is completed, as autumn advances, they return in merry bevvies to claim their share of the ripening fruits—no longer begrudged now, for they prefer such harmless viands as mountain-ash berries, and the insipid clusters of the madrone tree.

Robins occasionally winter on the east side of the mountains; and they are hard put to it unless they find a sufficient supply of ungathered fruit, preferably apples, left out to freeze or rot as the season dictates. West of the mountains they winter irregularly but quite extensively. There is nothing in the climate to forbid their staying all the time but I am inclined to think that their abundance in winter depends upon the berry crop, and especially that of the Madrona (*Arbutus menziesii*). The fall of 1907 was notable in this regard. The trees were in splendid bearing, and a certain patch on the bluff south of Fauntleroy Park was a gorgeous blaze of red, to which Robins resorted in hundreds.

Under such circumstances the birds establish winter roosts in convenient thickets, and repair to them at nightfall in great numbers. One such roost has been maintained on the outskirts of Seattle, just east of Ravenna Park, and in the winter of 1907-08 I estimated its population at some four thousand. The winter, it will be remembered, was a mild one, and every one in Seattle remarked the abundance of Robins.

In nesting, the Robin displays little caution, its homely mud-walled cup

not being withdrawn from most familiar observation. Indeed, as in the case of the accompanying illustration, the bird appears rather to court notoriety. The major crotches of orchard or shade trees are not shunned. From five



The Robin's nest.

to fifteen feet is the usual elevation, but nests are sometimes found at fifty feet; and again, tho rarely, on the ground. Window sills and beams of porches, barns, and outbuildings are favorite places, and, in default of these, brush-piles or log-heaps will do.

The mud used in construction is, of course, carried in the beak. Arrived at the nest with a beakful of mud, the mother bird drops her load, or plasters it loosely on the inside of the cup. Then she hops into the nest, settles as low as possible, and begins to kick or trample vigorously with her feet. From time to time she tests the smoothness or roundness of the job by settling to it with her breast, but

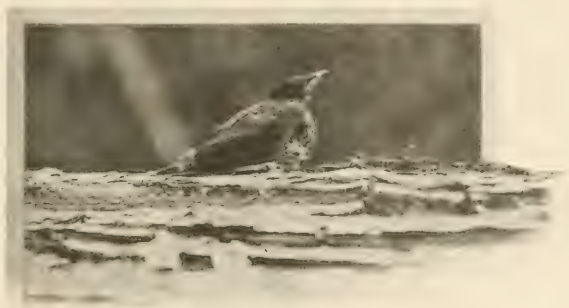
the squaring is altogether accomplished by the peculiar tedder action of her feet.

On the other hand, one Robin's nest which I found in the open sage had no mud in its construction and was altogether composed of felted vegetable

materials. Another freak nest, in Spokane, showed a hatchet handle firmly imbedded in its foundation and projecting from it a distance of six inches. The presence of the handle was not adventitious, for the nest was saddled on a pine branch, but it is difficult to conceive how the birds could have placed it in position at a height of fifteen feet.

Three eggs is the rule for the Western Robin; four is not unusual; but five is rare, and I have never seen six. In this respect, therefore, the Western Robin falls a little behind her eastern cousin.

Young Robins are darling creatures; that is conceded by everyone,—even by the cat. And hungry! Oh, so hungry! It is estimated that if the appetite of a man were proportioned to that of a young Robin, he would consume daily the equivalent of a sausage four inches in diameter and twelve feet long!



A ROBIN BABY.

In spite of the law-makers, who knew exactly what they were doing in declaring the Robin worthy of protection, thousands of these birds are annually slaughtered by unthinking people because of a rumored fondness for cherries and other small fruits. And yet we are assured by competent authorities that cultivated fruit forms only four per cent of the Robin's food thruout the year, while injurious insects constitute more than one-third. Robins in the cherry trees *are* provoking, especially when they bring the whole family and camp out; but there is one way to limit their depredations without destroying these most distinguished helpers; plant a row of mulberry trees, preferably the Russian Mulberry, along the orchard fence, and the birds will seek no further. I have seen a mulberry tree swarming with Robins, while neighboring fruit trees were almost untouched. The plan is simple, humane, and efficacious.

No. 100.

VARIED THRUSH.

A. O. U. No. 703. *Ixoreus naevius* (Gmelin).**Synonyms.**—MOUNTAIN ROBIN. WINTER ROBIN. OREGON ROBIN. COLUMBIAN ROBIN. VARIED ROBIN. PAINTED ROBIN.

Description.—*Adult male*: Above dark slate-color (plumbeous slate to blackish slate), sometimes, especially in winter, tinged with olivaceous; wings dusky edged more or less with slaty, the flight-feathers varied by ochraceous-buff, the middle and greater coverts tipped broadly with tawny or ochraceous forming two conspicuous bars; tail blackish, the outermost or several lateral rectrices tipped with white on inner web; a conspicuous lateral head-stripe originating above eye and passing backward to nape ochraceous or ochraceous-buff; area on side of head, including lores, suborbital space and auriculars, black or slaty-black connected narrowly on side of neck with a conspicuous pectoral collar of the same shade; chin, throat and remaining underparts tawny (or ochraceous-tawny to ochraceous-buff), paling on sides and flanks where feathers broadly margined with slaty-gray, changing to white on abdomen; under tail-coverts mingled white, slaty and ochraceous; axillars and under wing-coverts white basally broadly tipped with slaty-gray and under surface of flight-feathers crossed basally by band of white or buffish. Bill brownish black paling basally on mandible; feet and legs ochre-brown; irides brown. *Adult female*: Similar to adult male but paler and duller; upperparts olive-slaty to olive brownish; tawny of underparts much paler and pectoral collar narrower, of the shade of back or a little darker; more extensively white on abdomen. *Young birds*: Like adult female but more yellowish ochraceous below; pectoral band indistinct composed of ochraceous feathers having darker edges; other feathers of throat and breast more or less tipped with olive dusky. Length of adult 9.50-10.00 (241-254); wing 4.92 (125); tail 3.43 (87); bill .83 (21); tarsus .87 (22).

Recognition Marks.—Robin size; blackish collar distinctive; wings conspicuously varied by tawny markings; head pattern distinctive—otherwise very Robin-like in bearing and deportment.

Nesting.—*Nest*: of sticks, twigs, grasses and rotten wood smothered in moss, a bulky, handsome structure placed in saplings or trees at moderate heights without attempt at concealment. *Eggs*: usually 3, rarely 4, greenish blue sparingly speckled or spotted, rarely blotched with dark brown. Av. size 1.12 x .80 (28.4 x 20.3). *Season*: April 20-May 10, June 10-July 1; two broods.

General Range.—Mountains and forests of western North America, breeding from northern California (Humboldt County) to northern Alaska, wintering from Kadiak Island to southern California and straggling irregularly eastward during migrations.

Range in Washington.—Resident in coniferous forests thruout the State from sea-level to limit of trees; retires to valleys and lowlands in winter; less common east of the main divides (Cascade).

Authorities.—[Lewis and Clark, Hist. Ex. (1814), Ed. Biddle; Coles, Vol. II., p. 184]. *Turdus naevius*, Baird, Rep. Pac. R. R. Surv. IX., 1858, pp. 211 ("Simiahmoo, W. T."), 220. T. C&S. L. D. Kb. Ra. Kk. J. B. E.

Specimens.—U. of W. P. Prov. B. E.

NO; it does not always rain in western Washington. So far is this from being the case, that we will match our Februaries against all comers, and especially invite the attention of "native sons" of California. Our summers, too, are just a little dry latterly, and we begin to wonder with a vague uneasiness whether we are to be condemned to mediocrity after all. This paves the way for a declaration that the true web-footer, nevertheless, loves the rain, and will exchange a garish sky for a gentle drizzle any day in the year. The Varied Thrush is a true Web-footer. He loves rain as a fish loves water. It is his native element and vital air. He endures dry weather, indeed, as all of us should, with calm stoicism. *Lehrne zu leiden ohne zu klagen*, as poor Emperor Frederick II, the beloved "*Unser Fritz*," used to say. But the Varied Thrush is not the poet of sunshine. Dust notes have no charm for his eyes, and he will not misuse his vocal powers in praise of the crackling leaf. Ergo, he sits silent in the thickets while avian poet-asters shrill the notes of common day. But let the sun once veil his splendors, let the clouds shed their gentle tears of self-pity, let the benison of the rain-drops filter thru the forest, and let the leafage begin to utter that myriad soft sigh which is dearer than silence, and our poet Thrush wakes up. He mounts the chance of some fir tree and utters at intervals a single long-drawn note of brooding melancholy and exalted beauty, a voice stranger than the sound of any instrument, a waif echo stranding on the shores of time.



Taken in Rainier National Park

A MORNING IN PARADISE

There is no sound of the western woods more subtle, more mysterious, more thrilling withal, than this passion song of the Varied Thrush. Sombre depths, dripping foliage, and the distant gurgling of dark brown waters are its fitting accompaniments; but it serves somehow to call up before the mind's eye the unscaled heights and the untried deeps of experience. It is suggestive, elusive, and whimsically baffling. Never colorless, it is also never personal, and its weird



Forest of Western Washington, showing the Varied Thrush's home.

extra-mundane quality reminds one of antique china reds, or recalls the subdued luridness of certain ancient frescoes. Moreover, this bird can fling his voice at you as well from the tree-top as from the ground—now right, now left, the while he sits motionless upon a branch not fifteen feet above you.

Fantastic and varied as is this single note which is the Thrush's song, it may be fairly reproduced by a high-pitched whistle combined with a vocal flourish. A long, low intonation satisfies the bird, and it is possible to engage one after another of them in a sort of vocal contest in which curiosity and jealousy play unquestioned parts. Sometimes the Thrush's note is quite out of reach, but as often it descends to low pitches, while now and then it is flatted and the resonance crowded out of it, with an indescribable effect upon the listener, somewhere between admiration and disgust. At other times a trill is introduced, which can be taken care of by a trained palate, in addition to the vocal sound and the whistle.

In a similar way, the Varied Thrushes are found thruout the forest depths. Given tall timber and place, at least the present climate in Western

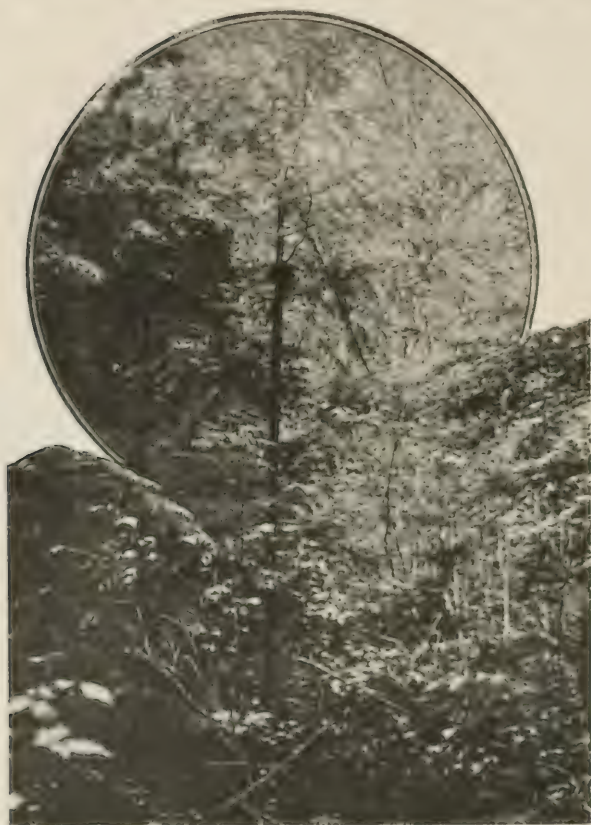
matters of no consequence. The prettiest compliment that Nature can pay to the genuine wildness of Ravenna Park, in Seattle, or Defiance Park, in Tacoma, is the continued presence of the Varied Thrush in nesting time. Run a survey line across any timbered valley of western Washington, or up any timbered slope of the Cascades or Olympics, and the bird most certainly encountered, without reference to local topography or presumed preference, will be the Varied Thrush. The bird may likewise be found among the larches and cedars of the Calispell Range.

The Varied Thrush is known by a variety of names, none more persistent or fitting than Winter Robin. It is a Robin in size, prevailing color, and general make-up; and it appears in the lowlands in large numbers only in the winter time, when the deep snows have driven it out of the hills. The Thrush is much more shy than the Robin, and altho it moves about in straggling companies, and does not shun city parks, it keeps more to cover. It also feeds largely upon the ground, and when startled by a passer-by it flutters up sharply into the trees with a wing-sound whose quality may soon be recognized as distinctive. At such times the bird makes off thru the branches with a low chuck, or *tsook*, or else tries the air by low notes which are like the song, only very much more subdued. This is manifestly an attempt to keep in touch with companions, while at the same time attracting as little hostile attention as possible. This note is, therefore, barely audible, and has very little musical quality, *aaruc*, or *üür*.

The nesting of the Varied Thrush was most fully brought to light by Mr. D. E. Brown, at Glacier, in the season of 1905. Like some tireless retriever, this ardent naturalist quartered the mazes of the dense spruce forest which covers the floor of the North Fork of the Nooksack, and in a range of some fifteen miles up and down that stream succeeded in locating forty-five nests of this, till then, little-understood species. Of these, twenty-five contained full sets of eggs, while the remainder fell before such accidents as desertion, robbing by Jays, Owls, etc. The first set taken was on May 5th, and the eggs were slightly incubated. The last, with fresh eggs, was taken June 19th,—probably the second nesting of some bird robbed earlier in the season. Among the nests examined, three contained sets of four each, and the remainder three. Of the entire number, all were placed in evergreen trees, save two. Of these last, one was set in the splinters in the broken top of a willow, about fifteen feet up; and the other was placed in an upright crotch of an elderberry bush at four feet from the ground.

Here are the woods that abound in moss-bunches,—great balls of thrifty green which grow, without apparent excuse, alike from the flimsiest and from the most substantial supports. It is in view of the abundance of these, that the Varied Thrush builds as it does, right out in the open of the underwood, near the top, or at least well up, in a small fir tree. The searcher has only the

Advantage of knowing that in order to secure adequate support the bird must build close up to the stem of the tree. The only exception to this rule is when branches intersect and so offer additional strength. Owing to the fact that



the large similar allards, considerable protection to the younger growth below, and because of the superior construction of the structure, grow very similar.

Old nests are common; and groups of half a dozen in the space of a single acre are evidently the consecutive product of a single pair of birds.

There is a notable division of territory among these Thrushes. As a rule, they maintain a distance of half a mile or so from any other nesting pair. In two instances, however, Mr. Brown found nests within three hundred yards of neighbors.

When one approaches the center of a reserve, the brooding female slips quietly from the nest and joins her mate in denouncing the intruder. The birds flit restlessly from branch to branch, or from log to log, uttering repeatedly a stern *tsook*, which is almost their sole recourse. If the nest is discovered and examined, the birds will disappear silently; and the chances are that they will never again be seen in that locality.



Taken at Glacier

*Photo by
author*

NEST AND EGGS OF VARIED THRUSH

A nest found on May 10th, with two eggs, was revisited on the 12th. It was saddled at a point ten feet out on a leaning hemlock, which jutted from the river bank over the roaring Nooksack. The prominence of the situation, in this instance, proved the owner's undoing. An Owl had evidently snatched her up on the previous night, the first of her maternal duty; for the nest and the neighboring foliage were strewn with feathers. Yet so suitly had the marauder executed his first coup that not an egg was broken. The eggs were three in number, subovate, of a slightly greenish blue, beautifully and heavily spotted—one might almost say blotched—with rufous, the handsomest, Mr. Brown says, ever seen.

A more typical nest, freshly examined, is placed at a height of six feet in the top of a tiny fir sapling, which required the support of a chance armful of leaning vine-maple poles. The nest proper is an immense affair, eight and a half inches deep and twelve inches by eight in diameter outside, and two and a half in depth and four in width inside. It would weigh about three pounds, and is, therefore, quite compact, altho the moss, which is the largest element in its composition, holds a large quantity of moisture. Twigs from six inches to a foot in length enter into the exterior construction, and these are themselves moss-bearing. Stripping off the outer moss-coat, one comes to the matrix or crucible-shaped vessel of rotten wood, an inch or more in thickness thruout, and sodden with moisture. Within this receptacle, in turn, appears another cup with walls three-quarters of an inch in thickness, and composed solely of dried grasses and moss, neatly woven and turned. The innermost lining comprises the same materials, not very carefully smoothed, but amazingly dry, considering the character of their surroundings. The brim of the nest is strengthened by bark-strips, the inner fiber of cedar bark being exclusively employed for this purpose; while the finishing coat consists of moss, compacted and flawless. There are, in fact, few nests to compare with that of the Varied Thrush in strength, elaborateness, and elegance.

No. 101.

WESTERN BLUEBIRD.

A. O. U. No. 767. *Sialia mexicana occidentalis* (TOWNS.).

Synonyms.—CALIFORNIA BLUEBIRD. MEXICAN BLUEBIRD. TOWNSEND'S BLUEBIRD.

Description.—*Adult male:* Head and neck all around and upperparts rich smalt blue, brighter on hindneck, rump and wings, paler on sides of neck and on throat; the shafts of wing-quills and tail-feathers and the exposed tips of the former black; more or less chestnut on scapulars usually irregularly continuous across back; sides of breast and sides, continuous across breast, chestnut; belly, flanks, crissum and under tail-coverts dull grayish blue (campanula blue to pearl blue). Bill black; feet blackish; iris dark brown. *In winter* touches of chestnut appear on crown, hindneck and sides of head and neck, and the blue of throat is slightly veiled by grayish brown skirting. *Adult female:* Somewhat like male but everywhere paler and duller; blue of upperparts clear only on rump, tail, lesser and middle wing-coverts and outer edges of primaries, there lighter than in male (campanula blue to flax-flower blue); first primary and outermost rectrices edged with white; chestnut of scapulars obsolete, merged with dingy mottled bluish or brownish-gray of remaining upperparts; exposed tips of remiges dusky; outer web of first primary whitish; blue of underparts replaced by sordid bluish gray, and chestnut of subdued tone (pale cinnamon-rufous) veiled by grayish-brown tips of feathers. *Young birds* somewhat resemble the adult female but the

blue is restricted to flight-feathers and rectrices, that of the male being brighter and bluer, that of the female duller and greener. In both sexes the back and scapular areas are brownish heavily and sharply streaked with white and the breast (jugulum, sides of breast, and sides) is dark sepia brown so heavily streaked with white as to appear "skeletonized." Length of adults 6.50-7.00 (165-177.8); wing 4.13 (105); tail 2.80 (71); bill .49 (12.5); tarsus .85 (21.5).

Recognition Marks.—Sparrow size; rich blue and chestnut coloring of male; darker blue coloration of wings in female distinctive as compared with that of *S. currucoides*.

Nesting.—*Nest*: in cavities, natural or artificial, old woodpecker holes, hollow trees, stumps, posts, bird-boxes, etc., lined with grasses and, occasionally, string, feathers and the like. *Eggs*: 4-6, uniform pale blue. *Av. size*, .82 x .62 (20.8 x 15.7). *Season*: May-July; two broods.

General Range.—Pacific coast district from Los Angeles County, California, to British Columbia, extending irregularly eastward in Oregon, Washington and British Columbia, and to Idaho and western Montana; south irregularly in winter as far as San Pedro Martir Mountains, L. C.

Range in Washington.—Summer resident, of general distribution west of the Cascades, rare and local distribution (chiefly in heavily timbered sections) east of the mountains; casually resident in winter.

Migrations.—*Spring*: c. March 1; East-side: Chelan, March 9, 1896; Concomully, March 15, 1896; West-side: Seattle, March 6, 1889; March 5, 1891; Tacoma, Feb. 25, 1905. *Fall*: October.

Authorities.—*Sialia occidentalis*, Townsend, Journ. Ac. Nat. Sci. Phila. Vol. VII, pt. II, 1837, 188. C&S. L.¹. Rh. D.¹. Kb. Ra. D.². Kk. J. B. E.

Specimens.—U. of W. Prov. B. BN.

MIU-MIU-MIU—mute you are, or next thing to it, you naughty little beauties! Why don't you sing, as do your cousins across the Rockies? You bring spring with you, but you do not come shifting your "light load of song from post to post along the cheerless fence." Is your beauty, then, so burdensome that you find it task enough to shift that?

Alack-a-day! our Bluebird does not sing! You see, he comes from Mexican stock, *Sialia mexicana*, and since we will not let him talk Spanish, or Aztec, or Zamepeyan, he flits about silent in seven languages. Er—but—what's this? Can we be mistaken? Here is what Dr. J. K. Townsend^a says of the Western Bluebird: "Common on the Columbia River in the spring. It arrives from the south early in April, and about the first week in May commences building. * * * A flock of eight or ten of these birds visited the British fort on the Columbia, on a fine day in the winter of 1835. They confined themselves chiefly to the fences, occasionally flying to the ground and scratching among the snow for minute insects, the fragments of which were found in the stomachs of several which I killed. After procuring an insect

^a. Narrative (1839), p. 344.

the male usually returned to the fence again, and warbled for a minute most delightfully. This note altho somewhat like that of our common *Wilsonii* [i. e., *S. sialis*], is still so different as to be easily recognized. It is equally sweet and clear but of so little compass (at this season) as to be heard only a short distance. In the spring it is louder, but it is at all times much less strong than that of the common species."

Dr. Brewer, condensing Nuttall, says^a: "He [Nuttall] speaks of its habits as exactly similar to those of the common Bluebird. The male is equally tuneful thruout the breeding-season, and his song is also very similar. Like the common species he is very devoted to his mate, alternately feeding and caressing her and entertaining her with his song. This is a little more *varied, tender, and sweet* [editor's italics] than that of the Eastern species, and differs in its expressions."

Our own Dr. Cooper testifies:^b "It also differs [i. e. from *S. sialis*] in its song, which is not so loud as sweet, and is curiously performed to sound as if two birds were singing at once and in different keys." Here the tradition begins to waver. More recent writers say: "The song of the Western Bluebird is not full but is, like his manners, gentle and sweet" (Lord); and, "It has the soft warble of its kind" (Mrs. Bailey). But again Dr. Brewer writes:^c "In regard to their song Mr. Ridgway states that he did not hear even during the pairing season, any note approaching in sweetness, or indeed similar to, the joyous spring warble which justly renders our Eastern Bluebird (*S. sialis*) so universal a favorite." The doctors disagree. Some one has been dreaming!

All I can say is, that in an experience of some sixteen seasons in Washington, I have never heard the Bluebird sing, or utter any note more pretentious than the plaintive *min* already referred to. It has beside, however, a note of protest, which sounds remotely like the *kek* of a distrustful Guinea fowl; and it indulges certain very unmusical chittering and clucking notes when endeavoring to attract the attention of its young.

No; the Western Bluebird is no musician, but he *is* a beauty; and he does have the same gentle courtesy of bearing which has endeared the Bluebird wherever he is known. It is impossible to treat of Bluebirds' domestic life without recourse to humanizing terms. Bluebird is a gentleman, chivalrous and brave, as he is tender and loving. Mrs. Bluebird is a lady, gentle, confiding, and most appreciative. And as for the little Bluebirdses they are as well behaved a lot of children as ever crowned an earthly affection.

Both parents are unsparing in their devotion to the rising generation, and so thoroly is this unselfish spirit reflected in the conduct of the children that it

a. Baird, Brewer & Ridgway, Vol. I., p. 66 [Reprint].

b. Rep. Pac. R. R. Surv., Vol. XII., 1879, p. 173.

c. Baird, Brewer & Ridgway, Land Birds, Vol. I., p. 66 [Reprint].



WESTERN BLUEBIRD AT NEST

is the subject of frequent remark. Mr. Pinley tells^a of an instance in which a first brood, just out of pinafores, turned to and helped their parents provide food for another batch of babies, and this not once, nor twice, nor casually.

but regularly, until the second brood were well matured. Instinct! Instinct! say you? But, wherefor? Is it not rather a foregleam of ethical life, an out-cropping of that altruistic tendency which hints a deeper kinship with the birds than we have yet confessed?

And real gallantry between the sexes may not be less ethical. On a day in Ohio, I located a Bluebird's nest in the knot-hole of an apple tree, and planted the camera in a commanding and somewhat threatening position. The cavity held callow young, but after the parents had visited their charges once and were somewhat relieved in anxiety, I saw a very pretty passage which took place between them. In a neighboring apple tree the male secured an elegant

fat grub and was most devoutly thrashing it, when the female appeared upon the scene. With a coaxing twitter she approached her mate; but he backed off, as much as to say, "Wait, wait, dear, he isn't dead yet!" But she was hungry and pressed her suit, until he in good-natured impatience flitted across to another limb. Here he whacked the worm vigorously, striking him first against one side of the limb and then against the other by a swinging motion of the head. The female followed her lord and cooed: "Oh, I know that will taste good. Um! I hav'n't tasted one of those white grubs for a week. So good of you, dearest! Really, don't you think he is done now?" The valiant husband gave the luckless grub just one more whack; and then, with every appearance of satisfaction, he hopped over toward his better half and placed the morsel in her waiting beak, while she received the favor with quivering wings and a soft flood of tender thanks. Altogether I think I never saw a prettier exhibition of conjugal affection, gallantry, and genuine altruism than the sight afforded. It was not only like the behavior of humans; it was like the best in human life, a pattern rather than a copy, an inspiration to nobility and gentleness of the very highest type.

Bluebirds have a decided preference for human society, or at least are very quick to appreciate the hospitality of proffered bird-boxes. Being chiefly insectivorous, their presence is a benediction to any neighborhood, and is an especial advantage in the orchard. A friend of mine in the East, who owns two young orchards and a small vineyard, maintains upon his premises upwards of fifty Bluebird boxes, each composed of a section of a hollow limb closed with a board at top and bottom, and provided with a neat augur-hole in the side. The boxes are made



*Western
Bluebird.
Photo
by
E. S.
Merrill*

LITTLE BOY BLUE.

fast to the apple-trees or lodged at considerable intervals along the intersecting fences. The experimenter finds that more than half of the boxes are occupied each season, and he counts the birds of inestimable value in helping to save the grapes and apples from the ravages of worms.

In providing for Bluebird's comfort, care must be taken to expel cats from the premises; or at least to place the box in an inaccessible position. English Sparrows, also, must be shot at sight, for the Bluebird, however valorous, is no match for a mob. Tree Swallows or Violet-greens may covet the nesting-box—your affections are sure to be divided when these last appear upon the scene—but the Bluebirds can take care of themselves here. For the rest, do not make the box too nice; and above all, do not make it of new lumber. Nesting birds do not care to be the observed of all observers, and the more natural their surroundings, the more at ease your tenants will be. An occasional inspection will not be resented, if the Bluebirds know their landlord well. There may be some untoward condition to correct,—an overcrowded nestling, or the like. At the end of the season the box should be emptied, cleaned, and if possible sterilized.

Two broods are raised in a season, and the species appears to be on the increase in the more thickly settled portion of the State. *Occidentalis* avoids the dry sections, and is nowhere common on the east side of the mountains, save during migrations. It is, however, regularly found on the timbered slopes of the Cascades, the Kalispell Range, and the Blue Mountains, where its range inosculates with that of the Mountain Bluebird. There is reason to suppose that its range will extend with the increase of irrigated territory. West of the mountains, per contra, the Bluebird affects the more open country, and especially that which has been prepared by fire and the double-bitted axe.

No. 102.

MOUNTAIN BLUEBIRD.

A. O. U. No. 768. *Sialia currucoides* (Bechstein).

Synonym.—ARCTIC BLUEBIRD.

Description.—*Adult male in summer:* Above rich cerulean blue, palest (turquoise blue) on forehead, brightest on upper tail-coverts, darkest (severes blue) on lesser wing-coverts; below pale blue (deepest turquoise) on chest, shading on sides of head and neck to color of back, paling on lower belly, crissum and under tail-coverts to whitish; exposed tips of flight feathers dusky. Bill and feet black; iris dark brown. *Adult male in winter:* Blue somewhat duller and feathers skirted more or less with brownish above and below, notably on hind-neck, upper back, breast and sides. *Adult female:* Like male but paler blue, clear on rump, tail and wings only, elsewhere quenched in gray; pileum, hindneck, back and

scapulars mouse-gray tinged with greenish-blue; outer edge of first primary and outer web of outermost rectrix, basally, white; a whitish orbital ring; underparts tinged with pale brownish gray fading to white posteriorly. *Young birds* somewhat resemble the adult female but are even duller; the blue of rump and upper tail-coverts is replaced by ashy gray; the back is streaked with white; the throat and jugulum are pale gray indistinctly streaked with whitish; chest, sides and flanks broadly streaked with drab, each feather having a white center. Length 7.00 (177.8) or over; wing 4.60 (117); tail 2.83 (72); bill .53 (13.4); tarsus .89 (22.6).

Recognition Marks.—Sparrow size; azure blue coloration of male and bluish-gray and azure of female unmistakable.

Nesting.—*Nest*: much as in preceding species. *Eggs*: usually 5, uniform pale blue sometimes very light bluish white, rarely pure white. Av. size, .80 x .60 (.203 x .152). *Season*: May, June; two broods.

General Range.—Mountain districts of western North America north to the Mackenzie and Yukon Territory, breeding eastward to the Black Hills and western Texas, westward to the Cascade-Sierras, southward to the higher ranges of Arizona, New Mexico and Chihuahua, in winter irregularly eastward upon the Great plains and southward to southern California, Lower California, etc.

Range in Washington.—Summer resident in the Cascade Mountains chiefly on the eastern slopes (but west to Mt. Rainier); common during migrations and irregularly resident in summer upon lower levels east of the Cascades (Wallula, May 15, 1907, breeding).

Migrations.—*Spring*: Chelan, Feb. 24, 1896; Concomully, March 15, 1896; Abitatum, March 13, 1900.

Authorities.—*Sialia arctica* **Brewster**, B. N. O. C. VII, Oct. 1882, p. 227. T. L., D., D., Sst. J.

Specimens.—1st, Prov. C.

A BIT of heaven's blue incarnate! We shall not stop to chide this exquisite creature that he does not sing. Why should he? It is enough to inspire song.

The sky has not fallen this beautiful morn,
But here is its messenger come to adorn
For a moment our wayside, and bring to our sight
In symbol of azure, a vision of right.

So hopeful, confiding, thou brave mountaineer,
Thou bringest to April a mighty good cheer.
Chill winter is vanquished, his rigors forgot,
The Lord is on earth,—what else matters not.

The Mountain Bluebird is of regular occurrence but of very irregular distribution in eastern Washington, and is scarcely known west of the Cascades. John Fannin found it in British Columbia "west occasionally, to Chilliwack, and other points on the lower Fraser; also Vancouver Island," but

we have only two records of its occurrence on the Pacific slope in Washington^a. The bird ranges up to the highest peaks of the central divide, but it is not at all common in the mountains. It seems to prefer more open situations and, so far from being exclusively boreal in its tastes, has been found nesting at as low an altitude as Wallula, on the banks of the Columbia River.

At Chelan in a typical season (1896) the migrations opened with the appearance, on the 24th day of February, of seven males of most perfect beauty. They deployed upon the townsite in search of insects, and uttered plaintive notes of Sialian quality, varied by dainty, thrush-like *tsooks* of alarm when too closely pressed. They did not at any time attempt song, and the entire song tradition, including the "delightful warble" of Townsend, appears to be quite without foundation, as in the case of *S. m. occidentalis*. On the 15th of March a flock of fifty Bluebirds, all males, were sighted flying in close order over the mountain-side, a vision of loveliness which was enhanced by the presence of a dozen or more Westerns. Several flocks were observed at this season in which the two species mingled freely. On the 27th of the same month the last great wave of migration was noted, and some two hundred birds, all "Arctics" now, and at least a third of them females, quartered themselves upon us for a day,—with what delighted appreciation upon our part may best be imagined. The males are practically *all* azure; but the females have a much more modest garb of reddish gray, or stone-olive, which flashes into blue on wings and tail, only as the bird flits from post to post.

In nesting, Mountain Bluebirds sometimes display the same confidence shown by the darker species; and their adoption into urban, or at least village life, would seem to be only a matter of time. They are a gentle breed, and it is an honor of which we may well strive to prove worthy, to be chosen as hosts by these distinguished gentlefolk.

"Gentle," as applied to Bluebirds, has always the older sense of noble,—noble because brave. My attention was first called to a nest in the timbered foothills of Yakima County, because its valiant owner furiously beset a Flicker of twice his size, a clumsy villain who had lighted by mistake on the Bluebird's nesting stub. The gallant defender did not use these tactics on the bird-man, but his accents were sternly accusing as the man proceeded to investigate a clean-cut hole eight feet up in a pine stub four feet thru. Five dainty eggs of the palest possible blue rested at the bottom of the cavity on a soft cushion of fine grasses.

This must have been a typical structure, but near Chelan I found the birds nesting at the end of a tunnel driven into a perpendicular bank much fre-

a. First record by R. H. Lawrence: Two seen on Stevens Prairie [Gray's Harbor County] April 22 [1861] (*Ude Auk*, Vol. IX., Jan. 1892, p. 47). Second record by the author: Male and female with five full-grown young encountered near Slui-skin Falls on Mt. Rainier, July 7, 1908, at an altitude of 6500 feet.

quented by Bank Swallows. The original miner might have been a Swallow, but the Bluebirds had certainly enlarged the hole and rounded it. There were no available trees for a mile or so around, but—well, really now, it did give one a turn to see this bit of heaven quench itself in the ground—for love's sake.

No. 103.

WESTERN GOLDEN-CROWNED KINGLET.

A. O. U. No. 748. *Regulus satrapa olivaceus* Baird.

Description.—*Adult male*: Crown-patch (partially concealed) bright orange or flame-color (cadmium orange); a border of plain yellow feathers overlying the orange on the sides; these in turn bordered by black in front and on sides; extreme forehead white, connecting with white superciliary stripe; a dark line thru eye; above bright olive-green, becoming olive-gray on nape and side of head and neck; wing-quills and tail-feathers much edged with light greenish yellow, the former in such fashion as to throw into relief a dusky spot on middle of secondaries; greater coverts tipped with whitish; underparts sordid white, sometimes dusky-washed, or touched on sides with olivaceous. *Adult female*: Similar, but with crown-patch plain yellow instead of orange. *Immature*: Without crown-patch or bordering black, gradually acquiring these thru gradation of color. Length about 4.00 (101.6); wing 2.16 (55); tail 1.57 (40); bill .29 (7.5); tarsus .67 (17).

Recognition Marks.—Pygmy size; orange, or yellow, and black of crown distinctive.

Nesting.—*Nest*: lashed to and largely concealed by drooping twigs on under side of fir bough near tip, an exquisite ball of mosses, lichens, liverwort, fine grasses, etc.; bound together with cobwebs and lined with the softest materials, vegetable-down, cow-hair, and feathers, 3 $\frac{1}{2}$ -7 inches in diameter, and placed from five feet up. *Eggs*: 7-9, rarely 10 (one of 11 on record), sometimes in two layers, dull white, cream white, or sordid cream-color, finely sprinkled or not with pale wood-brown or dull rufous, and sometimes, obscurely, with lavender. Av. size, .54 x .40 (13.7 x 10.2). *Season*: April 1-July 1; two broods.

General Range.—Western North America from Rocky Mountains to the Pacific Coast, southward in winter over highlands of Mexico to elevated districts of Guatemala; breeding from Colorado (near timber-line), eastern Oregon (mountains near Fort Klamath), Sierra Nevada (south to Mount Whitney), Mount Shasta, etc., northward to Kenai Peninsula and Kodiak Island, Alaska.

Range in Washington.—Common resident in coniferous timber (except pine) thruout the State, sea-level to limit of trees, less common east of Cascades, where numbers greatly augmented during migrations.

Authorities.—*Townsend*, Journ. Ac. Nat. Sci. Phila. VIII. 1839, 154 (*Corvinus* group). *Western satrapa*. *John Baird*, *Rep. Bur. B. & F.* 8—18 pt. II. 1858, p. 228 (part). (T.) C&S. L. Rh. D^r. Kb. Ra. D^r. Kk. B. E.

Specimens.—U. of W. P. Prov. B. E.

"GOOD things come done up in small packages," my college chum used to say (speaking, of course, of *la femme petite*), and that was before he knew the Golden-crowned Kinglet. Indeed, it is surprising how few people do know this amiable little monarch; and yet, I suppose, he is by all odds the most abundant bird in Washington. To one who seeks the honor of his acquaintance, he proves a most delightful friend; but he has his little modesties and reserves, becoming to a potentate, so that a thousand of him would never be "common," nor pall upon the senses.

Kinglets go in troupes, family parties, which keep a little to themselves ordinarily;

altho Chickadees and Nuthatches, or even Creepers and Wrens, are welcome messmates, in the friendly winter time. Evergreen trees, exclusively, are frequented, except during migrations upon the East-side where the favorite

cover is lacking, and the real abundance of the birds at all seasons is coextensive with that of the Douglas Spruce (*Pseudotsuga douglasi*). With tireless energy they search both bark and branches for insects' eggs and larvae scarce visible to the human eye. They peer about incessantly, bending and darting and twisting and squirming, now hanging head downward, if need be, now fluttering prettily against the under side of the branch above; but always on the go, until frequently one despairs of catching fair sight of the crown for the necessary fraction of a second. Of course it's a Golden-crown; but, then, we want to see it.

And all the time Cutikins is carrying on an amiable conversation with his



Taken in Rainier National Park.

From a Photograph Copyright, 1908, by W. L. Dawson

THE UNVEILING.

A FAVORITE HAUNT OF THE KINGLET

neighbor, interrupted and fragmentary, to be sure, but he has all day to it—*tss, tss-tsip-chip, tseck*. If you draw too near, *tsip* can be made to express vigorous disapproval.

Concerning the "song" one is a little puzzled how to report. One hears, no doubt, many little snatches and phrases which have in them something of the quality of the better known carol of the Ruby-crown, but they lack distinctness and completion. Moreover, they are never given earnestly, even in the height of the mating season, but, as it were, reminiscently, mere by-products of a contented mood. It may seem a little fanciful, but I am half tempted to believe that the Gold-crests are losing the ancient art of minstrelsy. The lines have fallen unto them in such pleasant places; food and shelter are no problems, and there is nothing of that shock and hazard of life which reacts most certainly upon the passion of song. And then it is *her* fault, anyway. Phyllis would rather whisper sweet nothings in the mossy bower than be serenaded, never so ably. Oh, perilous house of content!

It remained for Mr. Bowles, after years of untiring effort, to discover the first nest of this western variety. And then it came by way of revelation—a fir branch caught against the evening sky and scrutinized mechanically afforded grounds for suspicion in a certain thickening of the twigs under the midrib. Investigation revealed a ball of moss matched to a nicety of green with the surrounding foliage, and made fast by dainty lashings to the enveloping twigs; and, better yet, a basketful of eggs.

These birds probably nest at any height in the heaviest fir timber; but, because they are relatively so infinitesimal, it is idle to look for the nests except at the lower levels, and in places where the forest area has been reduced to groves and thickets. The boundaries of the prairie country about Centralia and northward afford the best opportunity for nesting, for here the Douglas Spruces attain a height of only a hundred feet or such a matter, and occur in loose open groves which invite inspection. Here, too, the Kinglets may be noted as they flit across from tree to tree, and their movements traced.

The kinglet and queenlet are a devoted pair in nesting time. Whether gathering materials for the nest or hunting for food after the babies are hatched, they work in company as much as possible. They are discovered, it may be a hundred yards from the home tree, gleaning assiduously. After a time one of the birds by a muffled squeak announces a beakful, and suggests a return; the other acquiesces and they set off homeward, the male usually in the lead. It looks as tho tracing would be an easy matter, but the birds stop circumspectly at every tree clump en route, and they are all too easily lost to sight long before the home tree is reached.

Nests may be found at any height from the level of the eyes to fifty feet (higher, no doubt, if one's eye-sight avails) but always on the under side of a fir limb, and usually where the foliage is naturally dense. The nest ball is a

wonderfully compacted affair of moss, both green and gray, interspersed with liverworts, dried grasses, soft weed fibers, and cow-hair. The deep depression of the nest cup scarcely mars the sphericity of the whole, for the edges are brought well in; so much so, in fact, that a containing branch overloaded with foliage upon one side, once tipped half way over without spilling the egg. The deep cavity is heavily lined with cow-hair and abundant feathers of



NEST OF WESTERN GOLDEN-CROWNED KINGLET IN THE BUSHES
THE MOST THAT MAY BE SEEN OF THE NEST

grouse or domestic fowl. These feathers are placed with their soft ends protruding, and they curl over the entrance in such fashion as almost or quite to conceal the eggs. One would like to particularize at great length, for no fervors of description can overstate the beauties of this Kinglet palace.

Eggs vary in number from five to nine, seven and eight being the rule. I once took a nest with eleven—one too many at the least, for it had to rest on top of the others. They are not much larger than Hummingbirds' and are quite as fragile. Mr. Bowles consumed twenty minutes in removing the contents of the big nest to the collecting box *without a break*. The eggs vary in

color from pure white to sordid white and dusky brown. In the last two cases the tint may be due to a profusion of fine brown dots, or to advancement in incubation, the shell being so thin that the progressive stages of the chick's development are dimly shadowed thru it.

The female Kinglet is a close sitter and will not often leave the nest until the containing branch is sharply tapped. Then, invariably, she drops down a couple of feet and flits sharply sidewise, with manifest intent to deceive the laggard eye. Yet almost immediately she is minded to return, and will do so if there is no further demonstration of hostilities. Re-covering the eggs is not always an easy matter, for the well is deep and the mouth narrow. One dame lighted on the brim of her nest and bowed and scraped and stamped, precisely as a carefully disciplined husband will when he brings muddy boots to the kitchen door. The operation was evidently quite unconnected with hesitation in view of my presence, but in some way was preparatory to her sinking carefully into the feather-lined pit before her. When she first covered the eggs, also, there was a great fuss made in settling, as tho to free her feathers from the engaging edges of the nest. When the bird is well down upon her eggs there is nothing visible but the top of her head and the tip of her tail.

The male bird, meanwhile, is not indifferent. First he hustles up onto the nesting branch and flashes his fiery crest in plain token of anger, but

later he is content to squeak disapproval from a position more removed.

While the mother bird is sitting, the male tends her faithfully, but he spends his spare moments, according to Mr. Bowles, in constructing "cock nests," or decoys, in the neighboring trees. These seem to serve no purpose beyond that of a nervous relief to



the impatient father, and are seldom as carefully constructed as the veritable bonus.

When the young of the first brood are hatched and ready to fly, the chief care of them falls to the father, while the female prepares for a second nesting. As to the further domestic relations one cannot speak with certainty,

but it would seem at least possible that fall bird troops consist of the combined families of Mr. and Mrs. Quiverful.

As to the time of home-making, the Kinglets are not very particular. Nor is it necessary that they should be. It is always spring here after the first of February. Besides that, a fir tree is both forest and store-house at any season. In the vicinity of Tacoma, the usual nesting time is the last week in April for the first set, and the second week in June for the second. The earliest record is April 9th, that of a nest containing half-grown young. The first egg of this set must, therefore, have been deposited about March 15th.

So far as we can make out, this bird is strictly resident in western Washington, but it is much less common on the east side of the Cascades, and is there largely migratory. Not only does the species retire in winter from the mountains to the lower foot-hills, but considerable numbers pass over the State to and from British Columbia. At such times they appear wherever timber or watered shrubbery is to be found. With manners so engaging and lives so sheltered, to say nothing of families so blessed in the yearly increase, is it any wonder that the gentle tribe of *Regulus* prevails thruout the giant forests of this western slope, and spills over in blessing wherever trees abound?

No. 104.

RUBY-CROWNED KINGLET.

A. O. U. No. 749. *Regulus calendula* (Linn.).

Description.—*Adult male*: Above olive-green, duller anteriorly, brightening to greenish yellow on edgings of quills and tail-feathers; a partly concealed crest of scarlet (flame-scarlet to scarlet-vermilion); two narrow, whitish wing-bars formed by tips of middle and greater coverts; some whitish edging on tertials; a dusky interval separating greenish yellow edges on outer webs of secondaries; a whitish eye-ring and whitish skirtings around base of bill; under parts soiled white, heavily tinged with buffy and olivaceous buff. *Adult female and immature*: Similar but without crown-patch. Length 4.00-4.50 (101.6-114.3); wing 2.33 (59.2); tail 1.72 (43.7); bill from nostril .25 (6.4).

Recognition Marks.—Pygmy size; scarlet crest distinctive. Note wing-bars and whitish eye-ring of female and young. Lighter than *R. v. grinnelli*.

Nesting.—*Nest*: a ball of moss, lichens, etc., bound together with cobwebs, and lashed to drooping twigs beneath branch of conifer, lined with vegetable-down, catkins, hair, and feathers, and placed at moderate heights. *Eggs*: 5-9, dull white, or pale buffy, faintly or sharply but sparingly speckled with reddish brown, chiefly about larger end. Av. size, .55 x .43 (14 x 10.9). *Season*: June; one brood (?).

General Range.—North America at large in wooded districts, north to limit

of trees, west to northwestern Alaska (Kowak River), breeding chiefly north of the United States, and irregularly in the higher ranges of the West.

Range in Washington.—Common spring and fall migrant; summer resident in northeastern portion of State only(?).

Migrations.—*Spring:* April, May. *Fall:* October.

Authorities.—**Baird**, Rep. Pac. R. R. Surv. IX, pt. II, 1858, p. 227. (T.) C&S, I, J. Rh.(?) D. Sr. Ra. D. Kk. J. E.

Specimens.—U. of W. P. Prov. B. B.N. E.

"WHERE'S your kingdom, little king?
Where's the land you call your own?
Where's your palace and your throne?
Fluttering lightly on the wing
Thru the blossom world of May
Whither lies your royal way?
Where's the realm that owns your sway,
Little King?"

Dr. Henry Van Dyke is the questioner, and the little bird has a ready answer for him. Being an Easterner, it is "Labrador" in May, and

"Where the cypress' vivid green
And the dark magnolia's sheen
Weave a shelter round my home"

in October. But under the incitement of the poet's playful banter, the Kinglet enlarges his claim:

"Never king by right divine
Ruled a richer realm than mine!
What are lands and golden crowns,
Armies, fortresses and towns,
Jewels, scepters, robes and rings,
What are these to song and wings?
Everywhere that I can fly
There I own the earth and sky:
Everywhere that I can sing
There I'm happy as a king."

And surely there is no one who can meet this dainty monarch in one of his happy moods without paying instant homage. His *imperium* is that of the spirit, and those who boast a soul above the clod must swear fealty to this most delicate expression of the creative Infinite, this thought of God made luminous and vocal, and own him king by right divine.

It seems only yesterday I saw him, Easter Day in old Ohio. The sig-

nificant dawn was struggling with great masses of heaped-up clouds,—the incredulities and fears of the world's night; but now and again the invincible sun found some tiny rift and poured a flood of tender gold upon a favored spot where stood some solitary tree or expectant sylvan company. Along the river bank all was still. There were no signs of spring, save for the modest springing violet and the pious buckeye, shaking its late-prisoned fronds to the morning air, and tardily setting in order its manifold array of Easter candles. The oak trees were gray and hushed, and the swamp elms held their peace until the fortunes of the morning should be decided. Suddenly from down the river path there came a tiny burst of angel music, the peerless song of the Ruby-crown. Pure, ethereal, without hint of earthly dross or sadness, came those limpid welling notes, the sweetest and the gladdest ever sung—at least by those who have not suffered. It was not indeed the greeting of the earth to the risen Lord, but rather the annunciation of the glorious fact by heaven's own appointed herald.

The Ruby-crowned Kinglet has something of the nervousness and vivacity of the typical wren. It moves restlessly from twig to twig, flirting its wings with a motion too quick for the eyes to follow, and frequently uttering a titter of alarm, *chit-tit* or *chit-it-it*. During migrations the birds swarm thru the tree-tops like Warblers, but are often found singly or in small companies in thickets or open clusters of saplings. In such situations they exhibit more or less curiosity, and if one keeps reasonably still he is almost sure to be inspected from a distance not exceeding four or five feet. It is here too that the males are found singing in spring. The bird often begins *sotto voce* with two or three high squeaks as tho trying to get the pitch down to the range of mortal ears before he gives his full voice. The core of the song is something like *tee, tee, tee, tee, titoorree'*, *titoorree'*, the last phrases being given with a rising inflection, and with an accent of ravishing sweetness. The tones are so pure that they may readily be whistled by the human listener, and a musical contest provoked in which one is glad to come out second best.

Having heard only the preparatory spring song for years, it was a matter of considerable rejoicing to come upon the birds at home in Stevens County. They were especially common in the neighborhood of Newport, and they sang incessantly and loudly from the depths of the giant larches, which abound there. It appears that the full-fledged breeding song is quite different from the delicate migratory carol. The preliminary notes are of much the same quality, but instead of accenting the final syllable of the *titoorree'* phrase, and repeating this, the phrase is given only once, with a sort of tittering, tremolo effect, and the emphasis is thrown upon a series of strong, sharp terminal notes, four or five in number, and of a uniform character—the whole somewhat as follows: *tee tee tee tee titteretteretter reet, cheep' cheep' cheep'*

cheep'. These emphatic notes are also rendered in a detached form at occasional intervals, usually after the entire song has been rehearsed; and they are so loud at all times as to be heard at a distance of half a mile. One individual began his song with an elaborate preliminary run of high-pitched, whining notes of a fineness almost beyond human cognizance; then effected a descent by a *kittite* note to the *tee tee tee* series. In his case, also, the emphatic closing notes had a distinctly double character, as *cheépy, cheépy, cheépy*.

We ransacked the Newport woods day after day with feverish eagerness, allured and goaded by the music, but filled also with that strange fire of oological madness which will lead its possessor to bridge chasms, dangle over precipices, brave the billows of the sea, battle with eagles on the heights, or crawl on hands and knees all over a forty-acre field. The quest was well-nigh hopeless, for the woods were dense and the tamaracks were heavily draped in brown moss, "Spanish beads," with a thousand possibilities of hidden nests to a single tree. June the First was to be the last day of our stay, and it opened up with a dense fog emanating from the Pend d'Oreille River hard-by. Nevertheless, six o'clock found us ogling thru the mists on the crest of a wooded hill. A Ruby-crown was humming fragmentary snatches of song, and I put the glasses on him. I was watching the flitting sprite with languid interest when Jack exclaimed petulantly, "Now, why won't that bird visit his nest?" "He did," I replied, lowering the binoculars. The bird in flitting about had paused but an instant near the end of a small fir branch about thirty-five feet up in a sixty-foot tree, springing from the hillside below. There was nothing in the movement nor in the length of time spent to excite suspicion, but it had served to reveal thru the glasses a thickening of the drooping foliage, clearly noticeable as it lay outlined against the fog.

We returned at ten o'clock and the first strokes of the hand-ax, as the lowermost spike bit into the live wood, sent the female flying from the nest into a neighboring tree. As the ascent was made spike by spike, she uttered a rapid complaint, composed of notes similar to the prefatory notes of the male's song; but during my entire stay aloft she did not venture back into the nesting tree, nor did the male once put in an appearance. The nest was only five and a half feet out from the tree trunk, and the containing branch an inch in thickness at the base. Hence, it was not a difficult, albeit an anxious, task to support the limb midway with one hand and to sever it with a pocket-knife held in the other, then to haul it in slowly.

The nest was composed largely of the drooping brown moss, so common in this region as to be almost a necessity, yet contrasting strongly with the clean bright green of the young fir tree. But, even so, it was so thoroughly concealed by the draping foliage that its presence would have escaped notice from any attainable standpoint, save for the mere density,—a shade thicker than elsewhere. At first sight one is tempted to call it a moss-ball, but close

examination shows it to be rather an assemblage of all sorts of soft substances, vegetable downs, cottons from the pussy willows and cottonwood trees, weathered aments, hair, fine grass (in abundance), with occasional strange inclusions, such as spider-egg cases, dried flower-stalks, and the like. The lining is exclusively of feathers, those from the breast of the Robin being



RUBY'S BASKETFUL.

most in evidence. A few of these curled up from under the neatly turned brim, so as to partly conceal the contents; but only a little effort was required to obtain a perfect view of the eggs from above.

I counted the glowing pile, slowly, calmly, as a miser counts his gold when the bolts are shot—twice to make sure—one, two, three, * * * *nine*, the last one being thrown in on top of the heap for good measure.

The eggs were marvelously fresh, inasmuch that in blowing them Mr Bowles coaxed seven of the nine yolks out unbroken thru the mere needle

holes in the shell which he counts a sufficient exit. In color they were pure white, flushed with the peculiar ruddy of fresh eggs having semi-transparent shells, with a pale broad band of brownish dust about the larger ends (the smaller one in one case).

When I had descended,—singing and whistling right merrily snatches of songs once popular, "Sweet Marie," and the like, for my spirits were uncommon high,—the mother-bird returned to the nesting tree and haunted the site of the ruined home persistently. First she peered down from the branch above; then she dropped down to the branch below, and craned her head, sorely perplexed. She lighted upon the white stump of the severed limb and examined it confusedly, then she fluttered in midair precisely where the nest ought to have been, and dropped to the limb below again in despair. This mystified quest she repeated over and over again until it wrung the hearts of the beholders. Well, well; we are inconsistent creatures, we humans. And somehow the comfortable philosophy of the bird-nester fails at these critical points.

No. 105.

SITKAN KINGLET.

A. O. U. No. 749a. *Regulus calendula grinnelli* Palmer.

Synonyms.—ALASKAN KINGLET. SITKA RUBY-CROWNED KINGLET. GRINNELL'S KINGLET.

Description.—Like preceding but of much darker coloration,—a "saturated" form; also wing somewhat shorter, bill larger, etc. Av. measurements of male: wing 2.23 (56.6); tail 1.60 (42.0); bill .34 (8.7); tarsus .72 (18.1).

Recognition Marks.—Of strikingly darker coloration than *R. calendula*—supposed to be the exclusive form in winter.

Nesting.—As preceding. Does not breed in Washington.

General Range.—Pacific Coast district breeding from British Columbia to head of Lynn Canal and Yakutat Bay, Alaska; south in winter (at least) to middle California.

Range in Washington.—Early spring and late fall migrant, common winter resident on Puget Sound.

Authorities.—*Regulus calendula*, Licht. *Cooper and Suckley*, Rep. Pac. R. R. Surv. XII, pt. II, 1860, p. 174 (Winter resident on Puget Sound). **Bowles**, Auk, Vol. XXIII, Apr. 1906, p. 148.

Specimens.—B. E. P(A).

SO far as our somewhat scanty observation goes, this would appear to be the prevailing form in the earlier spring migrations, and the only one found in winter upon Puget Sound. Thus, while the lighter-colored birds, which

^a *Regulus*. Six specimens.

summer in our mountains and in British Columbia, are enjoying sunshine in Mexico, this Alaskan coast dweller is re-dyeing his plumage under the dull skies of the Pacific watershed.

The Sitkan Kinglet is not abundant in winter, altho it enjoys a general distribution. It does not associate in flocks of its own kind to any large extent, but oftener two or three individuals join themselves to winter bird troops consisting of Chickadees, Seattle Wrens, Western Golden-crowned Kinglets, Puget Sound Bush-Tits, etc. At such times it is noticeable that they keep largely to the lower levels, for they hunt and titter among the spiraea thickets, salal bushes, logs and evergreen saplings, while their cousins only occasionally venture within five or ten feet of the ground, and range from there to the tops of the tallest firs.

The notes, too, of the Sitkan Kinglet are low-pitched and explosive, as compared with the fairy sibilations of the Golden-crowns. The neighborhood of "Seattle" Wrens and Western Winter Wrens will serve also to throw a certain wren-like quality of the Alaskan's note into fine relief.

No. 106.

CHICKADEE.

A. O. U. No. 735. *Penthestes atricapillus* (Linn.).

Synonyms.—BLACK-CAPPED CHICKADEE. BLACK-CAPPED TITMOUSE.

Description.—*Adult*: Top of head and nape shining black; throat dead black with whitish skirting posteriorly; a white band on side of head and neck, increasing in width behind; back and scapulars gray with an olivaceous cast and more or less admixture of buffy at the edges and as skirting; wings and tail dusky, more or less edged, especially on greater coverts and tertials, with ashy or whitish; breast and belly white; sides, flanks and crissum washed with buffy or light rusty (nearly whitish in summer); bill and feet dark. Rather variable in size; one adult specimen measures: wing 2.27 (57.7); tail 2.10 (53.3); bill .34 (8.6). Another: wing 2.70 (68.6); tail 2.57 (65.3); bill .38 (9.7). Length, 4.75-5.75 (120.6-146.1); average of eight specimens of medium size: wing 2.60 (66); tail 2.44 (62); bill .36 (9.1).

Recognition Marks.—Warbler size; of lighter coloration but not certainly distinguishable afield from *P. a. occidentalis* (q. v.).

Nesting.—*Nest*: a heavy mat of moss, grasses, and plant-down, lined with rabbits' fur, wool, hair, or feathers, in made hole or natural cavity of stump or tree, usually not over ten feet from the ground, and near water. *Eggs*: 5-8, white, marked sparingly with reddish brown, in small spots, tending to gather about larger end. Av. size, .58 x .47 (14.7 x 11.9). *Season*: April 15-May 15; one brood.

General Range.—Eastern North America north of the Potomac and Ohio Valleys. "A separate 'colony' inhabits the area between the Rocky Mountains and the Cascade Range, in eastern Washington (Walla Walla, Ellensburg, etc.), western Idaho (Lewi, Fort Sherman, etc.), and central British Columbia (Sicamores [Sicamoes], Clinton, Ashcroft, etc.)"—Ridgway.

Range in Washington.—As above.

Authorities.—*P. a. occidentalis* Brewster, B. N. O. C. VII, 1882, 228 (Walla Walla). J. If this colony proves to be completely isolated, as claimed, the bird should, perhaps, be separately named, and I would suggest *Penthestes atricapillus fortuitus*.

Specimens.—B. P^c.

THE Chickadees of eastern Washington, east of the Cascade foothills, along with those of northeastern Oregon, western Idaho, and southwestern British Columbia, are notably larger and brighter than *P. a. occidentalis*. In these and other regards they exactly reproduce the characters of *P. atricapillus*, which is a bird of the eastern United States, and from which they are widely separated by *P. a. septentrionalis*. Now Chickadees are resident wherever found. The most severe winters do not suffice to drive them south, and they are subjected to such uniform conditions as tend to insure stability of type, once adjustment to local environment is accomplished. We have here, therefore, either an example of a colony widely separated from the parent stock, and remaining inflexible under alien conditions, or else an indistinguishable reduplication of another form not closely related in time thru the interaction of similar conditions. If the latter supposition be the true one, and it probably is, we have in this bird a theoretical subspecies, but one which we cannot describe or distinguish in other than geographical terms.

The case is somewhat similar with our Nighthawks (*C. virginianus subsp.*) and Sparrow Hawks (*Falco sparverius subsp.*), but the problem in these instances is further complicated by the opportunities of migration.

* "The present example of an isolated colony of a particular form, or what must be regarded as the same form in the absence of obvious distinctive characters, is one of several instances which are very troublesome to both the systematist and the student of geographic distribution. The birds of this colony are more largely olive than *P. a. occidentalis*, which, however, are regarded as entirely distinct, and *P. a. septentrionalis* is a form smaller and darker than *P. a. atricapillus*, which inhabits the region immediately adjacent. It thus happens that, while these puzzling birds are respectively, if not absolutely, indistinguishable from *P. a. atricapillus*, they can hardly be considered exactly the same, since they are everywhere widely separated from the latter by the very extensive area occupied by *P. a. septentrionalis*. Ridgway.

No. 107.

OREGON CHICKADEE.

A. O. U. No. 735 b. *Penthestes atricapillus occidentalis* (Baird).

Synonym.—WESTERN BLACK-CAPPED CHICKADEE.

Description.—*Adults*: Similar to *P. atricapillus* but smaller and coloration much darker; whitish edging on wings and tail much reduced in area; "back varying from deep mouse-gray or very slight buffy slate-gray in spring and summer to deep hair-brown or light olive in fall and winter plumage"; sides and flanks pale buffy in spring, strong brownish buff or pale wood-brown in fall plumage. Length 4.50-5.25 (114.3-133.3); wing 2.44 (62); tail 2.20 (56); bill .37 (9.5); tarsus .66 (16.8).

Recognition Marks.—Warbler size; no white stripe over eye as distinguished from *P. gambeli*; back gray as distinguished from *P. rufescens*.

Nesting.—*Nest*: as in *P. atricapillus*, usually placed low in stump of deciduous tree. *Eggs*: as in foregoing. *Season*: April 15-May 15; one brood.

General Range.—Pacific Coast district from northern California to British Columbia (Port Moody).

Range in Washington.—Resident west of Cascades; characteristic of wet lowlands and borders of streams; intergrades with *typicus* on east slopes of Cascade Range.

Authorities.—*Parus occidentalis* Baird, **Baird**, Rep. Pac. R. R. Surv. IX, pt. II, 1858, p. 391. (T.) C&S. Rh. D¹. Kb. Ra. D². ? Ss¹. ? Ss². Kk. B. E.

Specimens.—U. of W. P¹. Prov. B. E.

CHICKADEES abound in Washington; and, because for the life of you you cannot surely tell whose notes you hear, there is a perennial necessity for levelling the glasses to make sure which is passing, Oregon or the Chestnut-backed. There are differences—Oh, bless you, yes—but then you always want to make certain, if only to pat yourself on the back and say, when you happen to have guessed correctly, "There, I knew it was an Oregon; I can always tell by its squeak."

Chickadees are friendly little folk (and this remark applies, irrespective of species), so that wherever they go, except in the busy nesting season, they form the nucleus of a merry band, Western Golden-crowned Kinglets, Sitkan Kinglets, Creepers, Juncoes, Towhees maybe, and a Seattle Wren or two to guard the terrestrial passage, and to furnish sport for the federated fairies. The Chickadees are undisputed leaders, tho their name be legion. While they remain aloft we may mistake their dainty squeakings and minikin wavs for those of Kinglets, but if we can only determine what direction the flock is pursuing, we may count on the vanguard's being composed of these sprightly, saucy little Black-caps.

Chickadee refuses to look down for long upon the world; or, indeed, to look at any one thing from any one direction for more than two consecutive twelfthths of a second. "Any old side up without care," is the label he bears; and so with anything he meets, be it a pine-cone, an alder catkin, or a bug bearing branchlet, top side, bottomside, inside, outside, all is right side to the nimble Chickadee. Faith! their little brains must have special guy-ropes and stays, else they would have been spilled long ago, the way their owners frisk about. Blind-man's buff, hide-and-seek, and tag are merry games enough when played out on one plane, but when staged in three dimensions, with a labyrinth of interlacing branches for hazard, only the blithe bird whose praises we sing could possibly master their intricacies.

But Chickadee is as confiding and as confidence-inviting as he is capable. It is precisely because you babble all our secrets to him on the first breath that the whole wood-side come to him for news. With the faintest of utterances he will interrogate

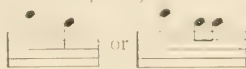
every crest-looking stranger; and the sound of the "yeechee" call is the signal for birds to be alert. At the repetition of it the leaves begin to rustle, the squirrels to sigh, and the log-heaps to give up their hidden store of sleepy Wrens.



squeak over the strange discovery; the Steller Jay takes notice and sidles over to spy upon the performance; while the distant-faring Crow swerves from his course and bends an inquiring eye toward the mystery. *Dec-dec-dec* says the Black-cap. A hundred beady eyes are bent upon you, trying to resolve your domino of corduroy or khaki. *Caw* says the Crow in comprehension, and you know that the game is up,—up for all but the Chickadee. He will stay and talk with you as long as you may endure to pucker your lips to his fairy lispsings.

It is no exaggeration to say that the "*Sawc-tee*" note of the Chickadee, passably imitated, is the quickest summons in the bird-world. It is the open sesame to all woodland secrets. One drawback, however, attends its use: you cannot compass it when the air is chilly and the lips thick. Now, the eastern bird, (*P. atricapillus*) has a clear, high-pitched call-note, *S'ee-tee*, or *Sawc-tee*, the

the type of this genus



which must be taken as and the calls of the west-

ern bird are best understood by reference to this norm. In the song of *occidentalis* the first note of the type, "high C," is oftenest repeated three or four times, and has a double character impossible

to represent on paper; while the whole ends, or not, with the lower note of *atricapillus*. These notes may be called the *deco deco deco* day series. In rare instances they become a ravishing trill on high C, beyond imitation or analysis.

For the rest, Chickadee's notes divide themselves into squeaks, vocal notes, and whistles. Of the squeaks one is a very high-pitched, whining note, which closely re-



Taken in Oregon.

Photo by W. L. F.

LADEN WITH DAINTIES

OREGON CHICKADEE SEAT

sembles the keep-in-touch, or flocking, cry of the Western Golden-crowned Kinglet. The Chickadees employ this when in company with Kinglets while ranging thru the tree-tops when no other sound is audible in the woods. Then there is a regular squeaking trill which is oftenest preliminary to the familiar *dee dee dee dee dee* (spoken) notes, but which sometimes appears alone, as by suspension or change of intent.

Of the whistled series the commonest are, first, a clearly rendered *dee*, not unlike the "Sweetee" theme, but of lower pitch and more trivial character; and, second, the *dee dee* series, also recorded.



FIGURE 1. Chickadee (Parus americanus) feeding its young in a hole in a rotten stub.

There is a striking resemblance between the whistled and the spoken series. The *day day* words correspond to the *dee dee* whistles, altho they are oftenest preceded by a fairly sneeze, which we have conventionalized in "Chid" and there is a spoken, or rather lisped, *kusteeeee*, which is very charming and delicate. A spoken trill occurs infrequently, and offers its analogy to both whistle and squeak.

These may seem like fine-spun distinctions. They are offered only to be forgotten, but the enjoyment of the new Chickadee troop you encounter will be enhanced by an effort to realize the striking variety of the notes heard.

Contrary to the wont of most hole-nesting birds, the Chickadee believes in warm blankets. Into the cavity, whether natural or artificial, the birds lug all

sorts of accumulations of moss, wool, hair, or rabbits' fur, until the place is half wool and the warm bird, during the chilly days of late April and early May, is snug and warm.

Ordinarily, a hole is dug by the birds in a rotten stub at a height of ten

or three feet. The near presence of water is a prime requisite, and a low swampy woods is the favorite location. Sometimes a deserted nest of a Gairdner Woodpecker may be used; but, on the other hand, excavations may be made in green wood at no little cost of exertion on the part of the midgits. Several nests I have seen in willow and poplar trees, and at a height of fifteen or twenty feet.

Young Chickadees are such cunning little creatures that the temptation to fondle them is sometimes irresistible. The parents may have very decided views as to the propriety of such action, or they may regard you as some benevolent giant whose ways are above suspicion. Not infrequently, if the young are kindly treated, the parent bird will venture upon the hand or shoulder to pursue its necessary offices.

No. 108.

MOUNTAIN CHICKADEE.

A. O. U. No. 738. *Penthestes gambeli* (Ridgway).

Description.—*Adults in spring and summer:* Somewhat as in *P. atricapillus*, head and throat similar but black interrupted by strong white superciliary stripe nearly or quite meeting fellow on forehead; upperparts plain deep ashy gray, or mouse-gray; wings and tail deeper gray with some pale grayish edging; sides of head and neck white; underparts (except throat) dull white more or less washed on sides, flanks, and under tail-coverts with gray. *Adults in fall and winter:* Upperparts washed with buffy; brownish on sides; some white edging on forehead and superciliary stripe broader. *Young* birds are duller as to black of head and neck, and have a less distinct superciliary. Length about 5.00 (127); wing 2.75 (70); tail 2.35 (60); bill .40 (10.2); tarsus .70 (18).

Recognition Marks.—Warbler size; much like Oregon Chickadee, but white superciliary distinctive; range higher (on the average) than other species.

Nesting.—*Nest:* quite as in *atricapillus* and similarly situated. *Eggs:* 5-8, pure white, or only faintly marked with reddish brown. Av. size, .60 x .45 (15.2 x 11.4). *Season:* May; one brood.

General Range.—Mountains of western United States from the Rockies to the Pacific Coast; north to British Columbia (chiefly east of the Cascades); south to northern Lower California.

Range in Washington.—Resident in the mountains and timbered foothills, chiefly east of the Cascade divide; casual at Seattle.

Authorities.—["Mountain Chickadee" Johnson, Rep. Gov. W. T. 1884 (1885), p. 22.] [*Parus montanus*, Gambel, Cooper and Suckley, Rep. Pac. R. R. Surv. XI, 1860, p. 194. "Fort Dalles" (Baird, "Fort Dalles, Oregon"). Not a valid Washington record.] *Parus gambeli* Lawrence, Auk, Vol. IX, Jan. 1892, p. 17. Cass. 10, 10, 10.

Specimens.—U. of W. Prov. C.

IT IS either accident or the methodical habit of scrutinizing every passing bird which first reveals to you the Mountain Chickadee. He is quite similar in general appearance and conduct to the foregoing species, altho the white superciliary line does confer a little air of distinction when you look closely. His notes, so far as observed, are not different; and he exhibits the cheerful confiding nature which makes the name of Chickadee beloved.

Gambeli is a bird of the foothills as well as of the mountains, and is confined almost exclusively to the East-side. I have not seen it on Puget Sound; but a dead bird was once brought by one of the school children to Miss A. L. Pollock, of Seattle.

Both of the nests which have come under my observation have been placed in decayed stumps not above three feet from the ground. One, in a wild cherry stub in northern Okanogan County, contained fresh eggs on the 18th day of May. Their color had been pure white, but they were much soiled thru contact with the miscellaneous stuff which made up the lining of the cavity: moss, cow-hair, rabbits' wool, wild ducks' down, hawks' casts, etc. The birds were not especially solicitous, altho once the female flew almost in my face as I was preparing the eggs for the cabinet. And then she sat quietly for several minutes on a twig not above a foot from my eyes.

On Senator Turner's grounds in Spokane—by permission—we came upon a nestful of well-grown young, on the 5th of June, 1906. The nest was two feet up in a stump, concealed by a clump of second-growth maples, picturesquely nestled at the base of a volcanic knob. Upon first discovery the parent birds both appeared with bills full of larvæ, and scolded daintily. Finally, after several feints, one entered the nesting hole and fed, with our eyes not two feet removed. Photography was impossible because of the subdued light, but it was an unfailing source of interest to see the busy parents hurrying to and fro and bringing incredible quantities of provisions in the shape of moths' eggs, spiders, wood-boring grubs, and winged creatures of a hundred sorts. Evidently the gardener knew what he was about in sheltering these unpaid assistants. Why, when it comes to horticulture, three pairs of Chickadees are equal to one Scotchman any day.

The young were fully fledged, and the irrepressible of the flock (there is always an irrepressible) spent a good deal of time at the entrance shifting upon his toes, and wishing he dared venture out. The old birds fed incessantly, usually alighting upon the bark at one side of the hole and debating for a moment before plunging into the wooden cavern, whence issued a chorus of childish entreaties.

The next morning our Chickadees had all flown, and upon breaking into the abandoned home we found a nest chamber some six inches in diameter, with its original warm lining mingled with fallen punk and trodden into an indistinguishable mass by the restless feet of the chick Chickadees. A special

feature of the interior construction was a knot, which had persisted as a hard core when the surrounding punk had been removed. This had evidently been no end of amusement to the young birds and of service to the parents as well, for its surface was polished by the friction of many *Penthestine* toes.

No. 109.

CHESTNUT-BACKED CHICKADEE.

A. O. U. No. 741. *Penthestes rufescens* Towns.

Description.—*Adults*: Crown and nape dull sepia brown becoming sooty toward lateral border—black before and behind eye, separated from sooty black throat patch by large white area broadening posteriorly on sides of neck; back, scapulars, rump, and sides of body rich chestnut; lesser wing-coverts grayish brown; upper tail-coverts hair-brown or more or less tinged with chestnut; wings and tail deeper grayish brown edged with paler gray; remaining underparts (centrally) white; under tail-coverts washed with brownish; bill black; feet brownish dusky; iris brown. The brown of crown and hind-neck deepens in winter. *Young* birds are duller in coloration, especially as to the chestnut of back and sides. Length about 4.75 (120.6); wing 2.35 (60); tail 1.90 (48.3); bill .37 (9.5); tarsus .65 (16.5).

Recognition Marks.—Pygmy size; chestnut of *back* and sides distinctive—otherwise not easily distinguished in the tree-tops from *P. a. occidentalis*. Frequents thicker timber and, usually, drier situations.

Nesting.—*Nest*: in hole of dead stub, usually some natural cavity enlarged and customarily at moderate heights, 10-20 feet, a couch of fine bark-shreds, green moss, etc., heavily felted with squirrel-, rabbit-, or cow-hair, and other soft substances. *Eggs*: 7-9, pure white as to ground and sparingly sprinkled with reddish brown dots, chiefly about larger end. Av. size, .61 x .47 (15.5 x 11.9). *Season*: April 25-June 15 (according to altitude); one brood.

General Range.—Pacific Coast district, from northern California to Alaska (Prince William Sound and head of Lynn Canal), east to Montana.

Range in Washington.—Resident; abundant and thoroly distributed thru forests of Olympic Peninsula and Puget Sound region, decreasing in numbers from Cascade divide eastward (in heavier coniferous timber only). (We have no records of its occurrence east of Stehekin.)

Authorities.—*Parus rufescens* Townsend, Journ. Ac. Nat. Sci. Phila. VII. 7. 1896. U. of W. P. Prov. B. E.

Specimens.—U. of W. P. Prov. B. E.

WHAT busy little midgets these are as they go trooping thru the tree-tops intent on plunder! And what a merry war they wage on beetle and nit as they scrutinize every crevice of bark and bract! The bird eats insects at

all times of year, but his staple diet is formed by the eggs and larvae of insects. These are found tucked away in woody crannies, or else grouped on the under surface of smaller limbs and persistent leaves, as of oak or madrone.

On this account the Chickadee must frequently hang head downward; and this he does very gracefully, using his tail to balance with, much as a boy uses his legs in hanging from a "turning pole," swinging to and fro as tho he thoroly enjoyed it.

If possible, the Chestnut-backed Chickadee is a little more delicately moulded and more fay-like in demeanor than its gray-backed cousin, the Oregon Chickadee. Unlike the latter, it is found commonly in the densest fir woods. It is found, also, in the oak groves of the prairie country; and, in general, it may be said to prefer dry situations. No hard and fast lines can be drawn, however, in the distribution of the two species. In many sections they mingle freely, and are equally abundant. In others, either may be quite unaccountably absent.

As nearly as we have made out to date, the commoner notes of the Chestnut-backed Chickadee closely simulate those of the Oregon. The *squeetee* call is either indistinguishable or a mere shade smaller. The sneezing note becomes more distinct as *kechéatwick*; and "*Chickadee*" becomes *kissadee*, the latter given so caressingly that you want to pinch the little darling. The Chestnut-backed Chickadee has a really truly song, but it is anything rather than musical. When the emotion of April is no longer controllable, the minikin swain mounts a fir limb and raps out a series of notes as monotonous as those of a Chipping Sparrow. The trial is shorter and the movements less rapid, so that the half dozen notes of a uniform character have more individual distinctness than, say, in the case of the Sparrow: *Chick chick chick chick chick chick*. Another performer may give each note a double character so that the whole may sound like the snipping of a barber's shears: *Chulip chulip chulip chulip chulip*.

Mr. Bowles finds that in beginning a nesting cavity this bird almost always avails itself of some natural advantage, as a place from which a bit of wood has been torn away, or a hole made by a grub of one of the larger Cerambycid beetles. On this account the bird enjoys a wider range of choice in nesting sites than *atricapillus*. Fir or oak stubs are oftenest chosen, and moderate heights are the rule; but I have seen birds go in and out of a nesting hole at an elevation of eighty feet.

Every furred creature of the woods may be asked to contribute to the furnishing of Chickadee's home. Upon a mattress of fur and hair the bird lays from seven to nine eggs, white as to ground color, and sparingly dotted with pale rufous. Chickadees are close sitters and must sometimes be taken from the eggs. They have, moreover, a unique method of defense, for when



CHESTNUT-BACKED CHICKADEE.

an eye appears at the entrance, the bird bristles up and hisses in a very snake-like fashion. This is too much for the nerves of a Chipmunk, and we guess that the single brood of a Chickadee is not often disturbed.

No. 110.

BUSH-TIT.

A. O. U. No. 743. *Psaltriparus minimus* (TOWNS.).

Synonyms.—LEAST BUSH-TIT, PUGET SOUND BUSH-TIT, PACIFIC BUSH-TIT.

Description.—*Adults*: Crown and hindneck warm brown abruptly contrasting with dull leaden or mouse gray hue of remaining upperparts; wings and tail slaty edged with pale gray; sides of head like crown but duller and paler; underparts sordid brownish white deepening into dull drab on sides and flanks. Length about 4.00 (10.1); wing 1.87 (47.5); tail 2.05 (52); bill .26 (6.6); tarsus .62 (15.8).

Recognition Marks.—Pygmy size; leaden coloration with brownish cap unmistakable.

Nesting.—*Nest*: a pendulous pouch from six inches to a foot in length and three or four inches in diameter, with small entrance hole in side near top; an exquisite fabrication of mosses, plant-down and other soft vegetable substances bound together by cobwebs and ornamented externally with lichens, etc., lined with plant-down and feathers; placed at moderate heights in bushes, rarely from ten to twenty feet up in fir trees. *Eggs*: 5-8, usually 7, dull white frequently discoloring to pale drab during incubation. *Av. size* .55 x .40 (13.9 x 10.2). *Season*: April-July; two or more broods.

General Range.—Pacific Coast district from Lower California to the Fraser River.

Range in Washington.—Resident west of the Cascades at lower levels, rare northerly—perhaps nearly confined to the Puget Sound basin.

Authorities.—*Parus minimus*, Townsend, Journ. Ac. Nat. Sci. Phila., VII, 1837, 100 (Columbia River). C&S, Ra. Kk. B. E.

Specimens.—U. of W. Prov. B.

IT IS an age of specialists. The man who could do anything—after a fashion—has given place to the man who can do one thing well. And in this we have but followed Nature's example. The birds are specialists. The Loon is a diver; the Cormorant a fisher; the Petrel a mariner, and so on until we come to Swallows, who are either masons or mining engineers; and to Catbird and Thrush, who are trained musicians.

The Bush-Tits belong to the builders' caste. They are specialists in domestic architecture. The little birds not only enjoy their task; they have nest building on the brain. A beautiful home is more than meat to them.

For its successful rearing they are ready to forswear the delights of foreign travel, and to its embellishment they devote every surplus energy, even after the children have come.

If there were time it would be interesting to trace the genesis of this architectural passion. Suffice it to say that the Bush-Tit comes of a race of builders. They call him Tit, a name shared in common with all the Chickadees; and Chickadee he is in structure and behavior, in his absolute indifference to position or balance, in his daintiness and sprightliness. Now Chickadees, altho they have lost the art of building, are specialists in nest-lining. (A nest lined with rabbit-fur means as much to a Chickadee as does a seal-skin jacket to you, my lady!) Hence the Chickadee strain is not lost upon our subject. The Tit, further, shows his affinity with the Kinglets in a habit of restlessly flirting the wings; and the Kinglets, as we know, are master builders. But it is to the Wrens that the Bush-Tit owes most of all, and especially to the Tule Wren, for he has taken the general conception of a completely enclosed nest and worked



NEST OF THE BUSH-TIT IN SITU

robbed by the blue-coated thug. One such tragedy, with its human interest, is reported for us by Miss Adelaide L. Pollock, the well-known bird-lover of Seattle, as follows:

"We found the long purse-shaped nest swinging from the lower branches of a giant red fir July 8th, and every day thereafter for two weeks some member of our class in ornithology visited the castle in the air. It was woven with a silken foundation gleaned in the cobwebs of the forest, lined with the pappus of the willow and the thistle, and chinked with moss, lichen, and faded hazel blossoms. With an eye to man-fashion, the architects had papered the home, but only in spots on the outside. What a delight it was to watch the parent birds light on the doorstep with a worm and plunge inside. By the wriggling and swaying of the nest we knew there was something doing there, but we had to guess at the gaping mouths. July 17th was a dreadful day for the nestlings. We heard the pitiful notes of birds in distress as we approached and found the nest was gone. Searching the ground it appeared with a great gaping hole in one side, which told of the work of jay, crow, or chipmunk. On investigation a tiny dead bunch of feathers was drawn out; and then something moved. The nest was tied to a hazel branch and quick as a thought the parents went in at the front and out at the new back door. Gaining courage they tried again, this time with food, and within the hour had apparently forgotten their tragedy and settled down with the one wee chick. While the parents were foraging we opened the slit and the way that baby bird turned tail-up and buried its head in the lining of the nest reminded us of the ostrich.

"July 20th we saw the youngster scramble up the sides of his home to the doorway, where he perched blinking his round brown eyes at us. He seemed to enjoy having his throat and back scratched and did not resent our presence, but his parents did, for the nest was deserted at sundown of July 22d after a long visit from the class in the afternoon. Yet the tiny fledgling could scarcely leap from twig to twig of the tangled undergrowth into which he disappeared. Two days later we fancied we recognized the same family by a peculiar white iris of one parent bird, as they flitted from branch to branch of an alder forty feet above the ground."

No. III.

SLENDER-BILLED NUTHATCH.

A. O. U. No. 727 a. *Sitta carolinensis aculeata* (Cassin).

Description.—*Adult male:* Top of head, nape and upper boundary of back lining black, with a slight greenish reflection; remaining upperparts ashy blue;

outer wing-quills fuscous, the second and three or four succeeding primaries narrowly touched with white on outer web in retreating order; inner quills and coverts with much black centering; tail feathers, except upper pair, black, the outer pairs squarely blotched with white in subterminal to terminal order; sides of head, and neck well up, and underparts white with a faint bluish tinge; distinctly marked, or washed more or less, on flanks and crissum with rusty brown; bill stout, subulate, the under mandible slightly recurved,—blackish plumbeous above, lighter at base of lower mandible; feet dark brown; iris brown. *Adult female*: similar to male, but black of head and back more or less veiled by color of back. Length 5.50-6.10 (139.7-154.9); wing 3.43 (87); tail 1.81 (46); bill .77 (19.5); tarsus .72 (18.2).

Recognition Marks.—Warbler to Sparrow size; tree-creeping habits; black and ashy blue above; white below.

Nesting.—*Nest*: a deserted Woodpecker hole, or newly-made cavity in stump or tree, usually at a considerable distance from the ground, and lined with leaves, feathers, or hair. *Eggs*: 5-8, sometimes 9 or even 10, white, thickly speckled and spotted with reddish brown and lavender. Av. size, .76 x .56 (19.3 x 14.2). *Season*: April, May; one brood.

General Range.—Pacific Coast states and British Columbia (to Ashcroft), in the northern portion of its range east of the Cascades. Non-migratory.

Range in Washington.—Resident, of regular occurrence in pine timber east of Cascades; rare and local in Puget Sound region.

Authorities.—? Townsend, Journ. Ac. Nat. Sci. Phila. VIII. 1839, 155 (Columbia River). *Sitta aculeata*, Cassin, **Cooper and Suckley**, Rep. Pac. R. R. Surv. XII, pt. II, 1860, p. 193. (T.) C&S. Rh. D. Ra. J. B.

Specimens.—(U. of W.) Prov. C.

Who-ee? o-o-o-o-o-o-o-o-o-o goes the Macfarlane Screech Owl in broad daylight. There is an instant hush on the pine-clad hillside—a hush followed by an excited murmur of inquiry among the scattered members of a winter bird-troop. If you happen to be the Screech Owl, seated motionless at the base of some large tree and half obscured in its shadows, perhaps the first intimation you will have that the search party is on your trail will be the click, click, click, of tiny claws on the tree-hole above your head, followed by a quank of interrogation, almost comical for its mixture of baffled anxiety and dawning suspicion of the truth. He is an inquisitive fellow, this Nuthatch, for, you see, prying is his business; but he is brave as well. The chances are that he will venture down within a foot or two of your face before he flutters off with a loud outcry of alarm. When excited, as when regarding a suspicious object, he has an odd fashion of rapidly right-and-left facing on a horizontal bough, as tho to try both eyes on you and lose no time between.

Nuthatch is the acknowledged acrobat of the woods—not that he acts for display; it is all business with him. A tree is a complete gymnasium in itself and the bird is master of it all. In all positions, any side up, this bird is there, fearless, confident; in fact, he rather prefers traveling head downward, espec-

ially on the main trunk route. He pries under bark-scales and lichens, peers into crevices and explores cavities in his search for tiny insects, larvæ, and insects' eggs, especially the latter. The value of the service which this bird and his associates perform for the horticulturist is simply incalculable. There should be as heavy a penalty imposed upon one who wantonly kills a Nuthatch or a Chickadee, as upon one who enters an enclosure and cuts down an orchard or a shade tree.

The Nuthatch has a variety of notes, all distinguished by a peculiar nasal quality. When hunting with the troop he gives an occasional softly resonant *tut* or *tut-tut*, as if to remind his fellows that all's well. The halloo note is more decided, *tin*, pronounced *à la française*. By means of this note and by using it in combination, they seem to be able to carry on quite an animated conversation, calling across from tree to tree. During the mating season, and often at other times, they have an even more decided and distinctive note, *quonk*, *quonk*, *quonk*, or *ho-onk*, *ho-onk*, in moderate pitch, and with deliberation. They have also a sort of trumpeting song, but this is rarely heard in Washington; and, indeed, all the notes of the Slender-billed Nuthatch have a softened and subdued character as compared with those of the eastern bird, typical *S. carolinensis*.

The nest of this Nuthatch is placed in a cavity carefully chiselled out, usually at a considerable height, in a pine stub, dead fir, or cottonwood. Both sexes share the labor of excavation, and when the cavity is somewhat deepened one bird removes the chips while the other delves. Like all the hole-nesting species of this family, but unlike the Woodpeckers, the Nuthatches provide for their home an abundant lining of moss, fur, feathers, and the like. This precaution is justified from the fact that they are early nesters—complete sets of eggs being found no later than the second week in April.

The male is a devoted husband and father, feeding the female incessantly during incubation, and sharing with her in the care of the large family long after many birds have forgotten their young. The young birds early learn to creep up to the mouth of the nesting hole to receive food when their turn comes; and they are said to crawl about the parental tree for some days before they attempt flight.

The Slender-billed Nuthatch is of rare occurrence west of the Cascades, being chiefly confined to the wooded edges of the prairies. In the eastern half of the State it may be rare locally but increases in abundance in the north-eastern section. Wherever found, this bird associates freely with the related species and is especially fond of the society of the Pygmies. A winter bird troop encountered near Spokane included, beside a half dozen Slender-bills, as many Red-breasted Nuthatches, a score of Pygmies, a dozen Mountain Chickadees, four or five Batchelder Woodpeckers, a few Clark Nutcrackers, and twenty Red-shafted Flickers.

Being non-migratory (with the irregular exception of *S. canadensis*) Nuthatches are called upon to endure the rigors of a northern climate with its occasional drop to thirty below; but this does not give them or their fellows great concern, because of the unfailing character of their food supply. Beside that, please remember that feathers and fat afford the warmest protection known.

No. 112.

RED-BREASTED NUTHATCH.

A. O. U. No. 728. *Sitta canadensis* Linn.

Synonyms.—RED-BELLIED NUTHATCH. CANADIAN NUTHATCH.

Description.—*Adult male*: Crown and nape shining black; white superciliary lines meeting on extreme forehead; a black band thru eye; remaining upperparts grayish blue; wings fuscous, unmarked; tail feathers, except upper pair, black; the outer pairs subterminally blotched with white in retreating order; chin, and sides of head, and neck below the black, pure white; remaining underparts rusty or ochraceous brown; bill short, subulate, plumbeous-black; feet dark brown. *Adult female*: Similar, but crown like the back, with only traces of black beneath; lateral head-stripe blackish; usually paler rusty below. *Immature*: Like adult female. Length, 4.25-4.75 (108-120.6); average of seven specimens: wings 2.61 (66.3); tail 1.43 (36.3); bill .50 (12.7).

Recognition Marks.—Pygmy size; black and grayish blue above; rusty below; tree-creeping habits.

Nesting.—*Nest*: of grasses, feathers, etc., in a hole of tree or stub, excavated by the bird, usually at lower levels. *Eggs*: 4-6, white or creamy white, speckled with reddish brown and lavender. Average size, .63 x .48 (16 x 12.2). *Season*: first week in May; one brood.

General Range.—North America at large, breeding from northern New England, northern New York, and northern Michigan northward, and southward in the Alleghanies, Rocky Mountains, and Sierra Nevada; in winter south to about the southern border of the United States.

Range in Washington.—Common resident and migrant in timbered sections thruout the State, more numerous in the mountains; winter residents are, possibly, Alaskan birds.

Authorities.—? Ornithological Committee, Journ. Ac. Nat. Sci. Phila. VII. 1837, 193 (Columbia River). **Cooper and Suckley**, Rep. Pac. R. R. Surv. XII. pt. II. 1860, 192. T. C. & S. Rh. D^r. Sr. Ra. D^r. Kk. J. B. E.

Specimens.—U. of W. P^r. Prov. B.

THERE is nothing big about the Red-breasted Nuthatch save his voice. If undisturbed, birdkins pursues the even tenor of his ways, like any other winged bug-hunter; but once provoke his curiosity or arouse suspicion.

and he publishes forthwith a broadside of sensational editorial matter which no thoughtful reader of the woods can overlook. The full war-dance song of the Red-breasted Nuthatch, executed, for instance, when he hears the false notes of the Screech Owl, is something like this: Nyāā nyāā nyāā nyāā nyāā nyāā nyā nyā nyā nyā nyā nyā nyā nyā and so on, in an incoherent strain of wild excitement, until he runs clean out of breath and quits, exhausted. The early notes of this orgic rhapsody are interrogative and penetrating; the succeeding notes are a sort of trumpeting challenge for the intruder to show himself; failing which, the irate Creeper drops into a lower, non-resonant series, of doubtful meaning and more doubtful morals. But the bird is not always angry, and the nasal call sounding on migration has a friendly quality about it which brings one hastening out-of-doors to greet the traveler again. Contrary to an early report, the Red-breast is quite at home in our deeper forests. Indeed, his is one of the most characteristic voices of the solemn fir woods. He still claims an interest however, in deciduous timber, in bottom lands, and in the oak trees which border the prairies. In western Washington, it is quite impossible to trace or to estimate the bird's

migrations, since it is present everywhere at all seasons; but it is probably much less abundant with us in winter. In eastern Washington, it is confined for the most part to the region of pine timber in summer, and altho it also winters here irregularly, the numbers in this part of the State are largely augmented by migrants during May and September.



RED-BREASTED NUTHATCH.

Through the intermittent quanking of a pair of these birds, my attention was directed to a couple of tall dead fir trees near the center of a woods, then known as the Puget Mill strip, but now as Moore's University Park Addition in Seattle. A little lazy scrutiny described the birds, mere twinkling bits of lime-gray, about one hundred and twenty-five feet up; and two or three mysterious disappearances established a suspicion that they were interested in a certain section of one of the trees. The suspicion received strong confirmation when, after a longer disappearance than usual on the part of the Red-



THE DEAD FIR TREES.

Photo by the Author.

THE RED-BREASTED NUTHATCH IN THE DEAD FIR TREES.

THE RED-BREASTED NUTHATCH IN THE DEAD FIR TREES.

breasts, a Harris Woodpecker alighted further up in the same stub. The Nuthatches immediately swarmed out and set upon the Harris with vigor and language. The Woodpecker was disposed to stand his ground, whereat the Nuthatches became highly enraged and charged upon the intruder so vigorously that the poor fellow was obliged to dodge about his flimsy body in the hope of dodging the birds' attacks. The Nuthatches did not seem to be too tired as they could get breath, and flitted their wings between strokes to vent their suppressed feelings. Harris naturally decided before long that the game wasn't worth the bother.

Time and again the little fellows flew about as if they

tree, but only to come back as often to the same fascinating belt. Finally, from a new vantage point I made out the hole, a very fresh one in an open stretch of bark about one hundred and twenty feet up. As I looked, one bird entered the excavation and remained, while the other mounted guard at the entrance. After about five minutes of this the tiny miner emerged and the other, the male, I think, took her place. His duty appeared to be to remove the chips, for he stuck his head out at the entrance momentarily, and one imagined, rather than saw at that height, the tiny flashes of falling white. All very romantic, but not a good "risk" from the insurance man's standpoint.

These Nuthatches must delight in work. They will spend a week in laborious excavation, and then abandon the claim for no apparent reason. Perhaps it is an outcropping of that same instinct of restlessness which makes Wrens build "decoy" nests. One such finished nest we found to be shaped not unlike a nursing bottle, a bottle with a bent neck. The entrance was one and three-eighths inches across, the cavity three inches wide, one and a half deep, and eight long (keeping in mind the analogy of the bottle resting on its flat side).

The birds do not always nest at ungetatable heights. A nest taken near Tacoma on the 8th of June, 1906, was found at a height of only seven feet in a small fir stump. The wood was very rotten, and the eggs rested only four inches below the entrance. The nest-lining in this instance was a heavy mat an inch in thickness, and was composed of vegetable matter—wood fiber, soft grasses, etc.—without hair of any sort, as would surely have been the case with that of a Chestnut-backed Chickadee, for which it was at first taken.

The Nuthatches appear to leave their eggs during the warmer hours of the day, and one must await the return of the truant owners if he would be sure of identification. One mark, but not infallible, is the presence of pitch, smeared all around and especially below the nesting hole. The use of this is not quite certain, but Mr. Bowles's hazard is a good one; viz., that it serves to ward off the ants, which are often a pest to hole-nesting birds. These ants not only annoy the sitting bird, who is presumably able to defend herself, but they sometimes destroy unguarded eggs, or young birds.

No. 113.

PYGMY NUTHATCH.

A. O. U. No. 730. *Sitta pygmæa* Vigors.

Synonym.—CALIFORNIA NUTHATCH (early name).

Description.—*Adults:* Crown, nape, and sides of head to below eye grayish olive or olive-brown, a buffy white spot on hind-neck (nearly concealed in fresh plumage); lores and region behind eye (bounding the olive) blackish; remaining upperparts plumbeous, browning (brownish slate) on flight feathers, etc., becom-

ing black on rectrices (except central pair); longer primaries usually with some edging of white; central pair of tail-feathers with elongated white spot; two outer pairs crossed obliquely with white, and the three outer tipped with slate; underparts sordid white, smoky brown, or even ferruginous, clearest (nearly white) on chin and cheeks; sides, flanks, and crissum washed with color of back; bill plumbeous, lightening below; feet plumbeous; iris black. *Young*: Like adults but crown and hind-neck nearly color of back; sides and flanks washed with brownish. Length 4.00 (101.6) or less; wing 2.56 (65); tail 1.34 (34); bill .56 (14.2); tarsus .59 (15).

Recognition Marks.—Pygmy size; top of head olive brown contrasting with plumbeous of back; gregarious habits.

Nesting.—*Nest*: a hole in dead top of pine tree, excavated by birds, smeared about entrance with pitch, and lined with soft substances, grass, hair, and feathers. *Eggs*: 5-8, pure white, flecked more or less heavily with reddish brown. Av. size, .61 x .54 (15.5 x 13.7). *Season*: May 1-20; one brood.

General Range.—Western United States from New Mexico, Colorado, and Montana to southern California, Washington, and eastern British Columbia; southward in Mexico to Mount Orizaba.

Range in Washington.—Resident in northern and eastern portions of the State east of the Cascade Mountains. Nearly confined to pine timber.

Authorities.—Baird, Rep. Pac. R. R. Surv. IX, pt. II, 1858, p. 378. C&S. 19, 1.

Specimens.—Prov. C.

AS for the Pygmy, the pine tree is his home. It is not quite proper, however, to speak of this Nuthatch in the singular. Lilliputians must hunt in troops and make up in numbers what they lack in strength. Pygmy Nuthatches are not merely sociable; they are almost gregarious. Where a company of Kinglets would be content to straggle thru a dozen trees, a pack of Pygmies prefers to assemble in one. Yet there is no flock impulse here, as with Siskins. Each little elf is his own master, and a company of them is more like a crowd of merry schoolboys than anything else. It's "come on fellers," when one of the boys tires of a given tree, and sets out for another. The rest follow at leisure but are soon re-assembled, and there is much jolly chatter with some good-natured scuffling, as the confederated mischiefs swarm over the new field of opportunity.

Nuthatches are not methodical, like Creepers, in their search for insects,—they are haphazard and happy. The branches are more attractive to them than the tree hole, and the dead top of the tree is most alluring of all. The Pygmies are never too busy to talk. The more they find the more excited their chatter grows, pretty lisping and chirpings quite too dainty for our dull ears. It makes us sigh to watch their happiness, and we go off muttering, "We, too, were young."

Again, it shocks us when we find these youngsters in knickerbockers

and braids paired off for nesting time. Tut, tut! children, so eager to taste life's heavier joys? A nest is chiselled out with infinite labor on the part of these tiny beaks, in the dead portion of some pine tree. The cavity is from four to twelve inches in depth, with an entrance a trifle over an inch in diameter. The owners share the taste of the Chickadees, and prepare an elaborate layette of soft vegetable fibers, fur, hair, and feathers, in which the eggs are sometimes quite smothered.

The parents are as proud as peacocks, and well they may be, of their six or eight oval treasures, crystal white, with rufous frecklings, lavish or scant. When the babies are hatched, the mother goes in and out fearlessly under your very nose; and you feel such an interest in the little family that you pluck instinctively—but alas! with what futility—at the fastenings of your purse.

No. 114.

SIERRA CREEPER.

A. O. U. No. 726 d. *Certhia familiaris zelotes* Osgood.

Synonym.—CALIFORNIA CREEPER (Ridgway).

Description.—*Adults*: Above rusty brown, broadly and loosely streaked with ashy white; more finely and narrowly streaked on crown; rump bright russet; wing-quills crossed by two whitish bars, one on both webs near base, the other on outer webs alone; greater coverts, secondaries and tertiaries tipped with whitish or grayish buff; a narrow superciliary stripe dull whitish or brownish gray; underparts sordid white or pale buffy, tinged on sides and flanks with stronger buffy. Bill slender, decurved, brownish black above paler below; feet and legs brown; iris dark brown. Length of adult male about 5.50 (139.7); wing 2.50 (63.5); tail 2.39 (60.8); bill .63 (16); tarsus .59 (15). Female a little smaller.

Recognition Marks.—Warbler size; singularly variegated in modest colors above; the only *brown* creeper in its range. Lighter colored than the next.

Nesting.—*Nest*: of twigs, bark-strips, moss, plant-down, etc., crowded behind a warping scale of bark whether of cedar, pine or fir. *Eggs*: usually 5 or 6, sometimes 7 or 8, white or creamy white speckled and spotted with cinnamon brown or hazel, chiefly in wreath about larger end. Av. Size .61 x .47 (15.5 x 11.9).

General Range.—The Cascade-Sierra mountain system from Mt. Whitney north to central British Columbia, east to Idaho; displaced by succeeding form on Pacific Coast slope save from Marin County, California, southward.

Range in Washington.—Resident in the Cascade Mountains, east in coniferous timber to Idaho where intergrading with *C. f. montana*.

Authorities.—? *Certhia familiaris montana* Johnson (Roswell H.), Condor, Vol. VIII., Jan. 1906, p. 27.

Specimens.—U. of W. B.

THE TAWNY CREEPER.

PEOPLE are always remonstrating with the bird-man for the assertion that birds are to be found everywhere if you but know them. Especially do they talk of the great silent forests on the western slopes of the Cascade Mountains, where they have traveled for forty miles at a stretch without seeing or hearing a living thing. Well; you cannot show me a square mile of woodland in all that area where at least the following species of birds may not be found: Western Winter Wren, Western Golden-crowned Kinglet, Western Flycatcher, Varied Thrush and California Creeper¹; and these, except the Flycatcher, at any season of the year. Silent birds they are for the most part, but each gives vent to a characteristic cry by which it may be known.

The Creeper is, par excellence, the bird of the forest. To him alone the very bigness of the trees is of the greatest service; for his specialty is bark, and the more bark there is the harder is this little atom to distinguish. Not only does he inhabit the deeper forests of the Cascade ranges and foothills, but his domain stretches eastward across the northern tier of pine-clad counties, and he is common among the tamaracks on the banks of the Pend d'Oreille.

In June, in the Stehekin Valley of Chelan County, we found these Creepers leading about troops of fully grown young. A recently occupied nest was disclosed to us by a few twigs sticking out from behind a curled-up bark scale of a fire-killed tree, near the Cascade trail. The twigs proved to be eighteen inches below the top of the nest proper, which was thus about twelve feet from the ground. The intervening space was filled in loosely with twigs, bark-strips, moss, cotton, and every other sort of woody loot. The mass was topped by a crescent-shaped cushion over an inch in thickness, deeply hollowed in the center, six inches from horn to horn, and four and a half from bole to bark; and this cushion was composed entirely of soft inner bark-strips and a vegetable fiber resembling flax in quality—altogether a splendid creation.

No. 115.

TAWNY CREEPER.

A. O. U. No. 726c. *Certhia familiaris occidentalis* Ridgway.

Synonym.—CALIFORNIAN CREEPER (A. O. U.).

Description.—"Similar to *C. f. zelotes* but browner and more suffused with buffy above; wing markings more pronouncedly buff; underparts more buffy"

¹ Shading into the following variety, *C. f. occidentalis*, upon the lower levels.

(Ridgway). Length of male: wing 2.44 (61.9); tail 2.41 (61.2); bill .60 (15.2); tarsus .61 (15.5).

Recognition Marks.—As in preceding; darker.

Nesting.—*Nest*: as in preceding; placed behind sprung bark scale usually at moderate heights, 3-20 feet up (one record of 60). Inner diameter of one nest 1 3/4 inches, depth 2 1/2. *Eggs*: 5 or 6, as in *C. f. zelotes*. Av. size .58 x .47 (14.7 x 11.9). *Season*: May, June; two broods.

General Range.—Pacific Coast district from Northern California to Sitka.

Range in Washington.—Resident thruout the West-side from tidewater up.

Authorities.—? *Certhia familiaris* Orn. Com. Journ. Ac. Nat. Sci. Phila., VII. 1837, 193 (Columbia River). *Certhia americana* **Baird**, Rep. Pac. R. R. Surv., IX. 1858, p. 372, part. (T). C&S. L. Rh. Ra. B. E.

Specimens.—U. of W. Prov. B.N.

TO one who loves birds with an all inclusive passion—such as the undecided bachelor is wont to confess for the fair sex—the temptation to use superlatives upon each successive species as it is brought under review is very strong. But here perhaps we may be pardoned for relaxing our attention, or, it may be, for being caught in the act of stifling a little yawn. *Certhia* is a prosy drab, and all the beauty she possesses is in the eyes of her little hubby—dear, devoted creature.

This clerkling (hubby, of course, I mean) was brought into the world behind a bit of bark. His first steps, or creeps, were taken along the bark of the home tree. When the little wings got stronger and when the little claws had carried him up to the top of tree number One, he fluttered and spilled thru the air until he pulled up somehow, with heart beating fiercely, at the base and *on the bark* of tree number Two. Since then he has climbed an almost infinity of trees (but I dare say he has kept count). Summers and winters have gone over his head, but never a waking hour in which he has not climbed and tumbled in this worse than Sisyphæan task of gleaning nits and eggs and grubs from the never-ending bark. Why, it gets upon the nerves! I pray you think, has not this animate brown spot traveled more relative miles of ridgy brown bark in his wee lifetime than ever mariner on billowy sea! Work, work, work! With the industry of an Oriental he seeks to shame the rollicking caprice of Chickadee, and to be a "living example" to such spendthrifts as Goldikins, the Kinglet.

But wait! I am not sure. *Could* anyone live in these majestic forests, could anyone breathe this incense of perpetual balsam, could anyone mount triumphantly these aspiring tree-boles, way, way up into the blue, without growing the soul of a poet? Hark! "*Tee, tee, tee, Ping, tee, tee*,"—an



Taken near Tacoma

Photo by W. Leon Dawson.

NESTING SITE OF THE TAWNY CREEPER



Photo by W. Leon Dawson.

COMMON TAWNY CREEPER IN DEAD OAK TREE.

behind which six
callow babies rest-
ed on a soft cush-
ion of moss, hair
and bark-fiber,
supported by
twigs criss-crossed
and interwoven,
to take up all
available space be-
low.

This looked
easy; but the most
diligent search the
following season
served only to dis-
cover the records of
past years and
hopeful prospects.
Bark scales of just
the right di-
mensions do not
abound, and those
which do look
ready-made to be
offered to the bird
or else to have re-
ceived the scant
compliment of a
few criss-crossed
sticks which mean,
"We would have
built here, if we
had not liked
some other place
better."

Not until May
5th, 1907, did Mr.
Bowles discover
the first eggs, five
speckled beauties

No. 116.

WESTERN MARSH WREN.

A. O. U. No. 725 c. *Telmatodytes palustris plesius* (Gibberholser).**Synonym.**—INTERIOR MARSH WREN.

Description.—*Adult*: Crown blackish; forehead light brown centrally,—color sometimes spreading superficially over entire crown; hind neck and scapulars light brown (raw umber, nearly); rump warm russet; a triangular patch on back blackish, with prominent white stripes and some admixture of russet; wings and tail fuscous or blackish on inner webs, brown with black bars on exposed surfaces; upper and under tail-coverts usually and more or less distinctly barred with dusky; sides of head whitish before, plain brown or punctate behind; a white superciliary line; underparts white, tinged with ochraceous buff across breast, and with pale brown or isabella color on sides, flanks, and crissum; bill and feet as usual. Length 4.50-5.75 (11.3-14.6); av. of ten males: wing 2.12 (54); tail 1.82 (46.4); bill .56 (14.2); tarsus .79 (20.1).

Recognition Marks.—Warbler size; brown and black pattern of back with white stripes distinctive; white superciliary stripe and long bill distinctive in haunts. Strictly confined to bulrushes and long grass of marshes. Lighter and larger than *T. p. paludicola*.

Nesting.—*Nest*: a ball of reeds and grasses, chinked and lined with cat-tail down, with entrance in side, and suspended in growing cat-tails, bulrushes or bushes. *Eggs*: 5-7, so heavily speckled with olive brown or sepia as to appear almost uniform brown. Av. size, .65 x .52 (16.5 x 13.2). *Season*: May, July; two broods.

General Range.—Western United States and southern British Columbia between the Rocky Mountains and the Cascade-Sierra Range, breeding from New Mexico northward; south during migrations to Cape district of Lower California and Western Mexico.

Range in Washington.—Summer resident in all suitable localities east of the Cascades.

Authorities.—*Telmatodytes palustris paludicola* Brewster, B. N. O. C. VII 1882, 227 (Ft. Walla Walla). D², Ss¹, J.

Specimens.—C. P.

"TO the Coots and Rails belong the ooze-infesting morsels of the swamp, but all the little crawling things which venture into the upper story of the waving cat-tail forest, belong to the Long-billed Marsh Wren. Somewhat less cautious than the waterfowl, he is the presiding genius of flowing acres, which often have no other interest for the ornithologist. There are only two occasions when the Marsh Wren voluntarily leaves the shelter of the cat-tails or of the closely related marshables. One of these is when he is driven South by the migrating instinct. Then he may be seen skulking about the borders of the streams, sheltering in the weeds or clambering about the drift. The other

time is in the spring, when the male shoots up into the air a few feet above the reeds, like a ball from a Roman candle, and sputters all the way, only to drop back, extinguished, into the reeds again. This is a part of the tactics of his courting season, when, if ever, a body may be allowed a little liberty. For the rest, he clings sidewise to the cat-tail stems or sprawls in midair, reaching, rather than flying from one stem to another. His tail is cocked up and his head thrown back, so that, on those few occasions when he is seen, he does not get credit for being as large as he really is" (*The Birds of Ohio*).

Since his sphere of activity is so limited, we may proceed at once to the



NEST OF WESTERN MARSH WREN, IN SITU

main interest, that of nest-building. And this is precisely as the Marsh Wren would have it, else why does he spend the lifelong day making extra nests, which are of no possible use to anyone, save as examples of *Telmatodytine* architecture? It is possible that the female is coquettish, and requires these many mansions as evidence that the ardent swain will be able to support her becomingly after marriage. Or, it may be, that the suitor delights to afford his lady love a wide range of choice in the matter of homes, and seeks thus to drive her to the inevitable conclusion that there is only one home-maker for her. However this may be, it is certain that one sometimes finds a considerable group of nest-balls, each of apparent suitability, before any are occupied.

On the other hand, the male continues his harmless activities long after his mate has selected one of his early efforts and deposited her eggs; so that the oölogist may have to sample a dozen "cock's nests," or decoys, before the right one is found. Some empty nests may be perfectly finished, but others are apt to lack the soft lining; while still others, not having received the close-pressed interstitial filling, will be sodden from the last rains.

The Marsh Wren's nest is a compact ball of vegetable materials, lashed midway of cat-tails or bulrushes, living or dead, and having a neat entrance hole in one side. A considerable variety of materials is used in construction, but

in any given nest only one textile substance will preponderate. Dead cat-tail leaves may be employed, in which case the numerous loopholes will be filled with matted down from the same plant. Fine dry grasses may be utilized, and these so closely woven as practically to exclude the rain. On Moses Lake, where rankly growing bulrushes predominate in the nesting areas, spirogyra is the material most largely used. This, the familiar, scum-like plant which masses under water in quiet places, is plucked out by the venturesome birds in great wet hanks and plastered about the nest until the required thickness is attained. While wet, the substance matches its surroundings admirably, but as it dries out it shrinks considerably and fades to a sickly light green, or greenish gray, which advertises itself among the obstinately green bulrushes. Where this fashion prevails, one finds it possible to pick out immediately the oldest member of the group, and it is more than likely to prove the occupied nest.

The nest-linings are of the softest cat-tail down, feathers of wild fowl, or dried spirogyra teased to a point of enduring fluffiness. It appears, also, that the Wrens often cover their eggs upon leaving the nest. Thus, in one we found on the 17th of May, which contained seven eggs, the eggs were completely buried under a loose blanket of soft vegetable fibers. The nest was by no means deserted, for the eggs were warm and the mother bird very solicitous, inasmuch that she repeatedly ventured within a foot of my hand while I was engaged with the nest.

The Marsh Wrens regard themselves as the rightful owners of the reedy fastnesses which they occupy, and are evidently jealous of avian, as well as human, intruders. In one instance a Wren had constructed a sham nest hard against a completed structure of the Yellow-headed Blackbird, and to the evident retirement of its owner. Another had built squarely on top of a handsome Blackbird nest of the current season's construction, and with a spiteful purpose all too evident.

No. 117.

TULE WREN.

A. O. U. No. 725 a. **Telmatodytes palustris paludicola** (Baird).

Synonyms.—MARSH WREN (locally). WESTERN MARSH WREN (now restricted to *T. p. flesius*). CALIFORNIA MARSH WREN (inappropriate). PACIFIC MARSH WREN.

Description.—*Adult*: Similar to *T. p. flesius*, but smaller and with coloration decidedly darker. Length about 4.75 (120.6); wing 1.97 (50); tail 1.73 (44); bill .52 (13.2); tarsus .78 (20).

Recognition Marks.—Pygmy size; brownish coloration; reed-haunting habits and sputtering notes distinctive.

Nesting.—*Nest*: shaped like a cocoon, of reeds and grasses, lined with plant-down, and with entrance in side; placed two or three feet high in reeds, rarely, high in bushes of swamp. *Eggs*: 5 or 6, ground-color grayish brown but so heavily dotted and clouded with varying shades of chocolate and mahogany as to be frequently obscured. Av. size .67 x .52 (17 x 13.2). *Season*: last week in March to July; two broods.

General Range.—Pacific Coast district from British Columbia south during migration to mouth of Colorado River and extremity of Lower California.

Range in Washington.—Resident in suitable localities west of Cascades.

Authorities.—*Cistothorus (Telmatodytes) palustris* Cav. **Baird**, Rep. Pac. R. R. Surv. XII, pt. II., 1858, p. 364, part. C&S, L., Ra. Kk. B. E.

Specimens.—U. of W. E. Prov.

WHEN the February sun waves his golden baton over the marshes of western Washington, they yield up a chorus of wren song which is exceeded only by that of the frogs. The frogs, to be sure, have the advantage, in that their choral offering has greater carrying power; but the Wrens at close quarters leave you in no doubt that the palm belongs to them. One hesitates to call the medley of clicking, buzzing, and sputtering, which welters in the reeds, music; but if one succeeds in catching sight of a Tule Wren, holding on for dear life to a cat-tail stem, and vibrating like a drill-chuck with the effort of his impassioned utterance, he feels sure that music is at least intended.

Wrens are ever busy bodies, and if they could not sing or chatter, or at least scold, they surely would explode. It is a marvel, too, that they find so much to interest them in mere reeds, now green, now brown, set above a foot or so of stagnant water. But, bless you! Do not waste your sympathies upon them. They have neighbors,—Red-wings, Yellow-throats, and the like—and is it not the gossips of the little village who are most exercised over their neighbors' affairs?

It seems probable that our Tule Wrens are largely resident. Certainly they are abundant in the more sheltered marshes in winter; and, since the species does not extend very far northward, it is possibly not too much to assume that our birds live and die in a single swamp. They are, as a consequence, very much mixed up on their seasons, and I have heard a swamp in full song in November.

Nesting in the South Tacoma swamp, where several scores at least may be found, begins the last week in March, and full sets of eggs may certainly be found by the first week in April. But "decoys" are, of course, the rule. In a day Mr. Bowles found fifty-three nests, only three of which held eggs or young. At least two broods are raised in a season.

The eggs, usually five or six in number, are so overlaid with tiny dots as

to appear of an almost uniform hair brown in color, very dark, except occasionally in the case of the last laid egg. The sitting bird must subject her eggs to frequent turning in the nest, for they become highly polished during incubation.

No. 118.

SEATTLE WREN.

A. O. U. No. 719 c. *Thryomanes bewickii calophonus* Oberholser.

Description.—*Adults*: Above, dark olive-brown, or warm sepia brown with an olive tinge; the rump with downy, concealed, white spots; wings showing at least traces of dusky barring,—sometimes complete on tertials; tail blackish on concealed portions, distinctly and finely barred with black on exposed portions; the outer pairs of feathers white-tipped and showing white barring, incipient or complete on terminal third; a narrow white superciliary stripe, and an indistinct dark stripe thru eye; underparts grayish white, tinged on sides and flanks with brown; under tail-coverts heavily barred with blackish; bill dark brown above, lighter below; culmen slightly decurved. Length: 5.00-5.50 (127-139.7); wing 2.08 (52.8); tail 2.01 (52.3); bill .59 (15); tarsus .79 (20).

Recognition Marks.—Warbler size; known from Western House Wren by superciliary stripe and whiter underparts, mostly unbarred; a little larger and more deliberate in movements.

Nesting.—*Nest*: in holes or crannies about stumps, upturned roots, brush-heaps, etc., or in buildings; a rather slight affair of dried grasses, skeleton leaves, mosses, and waste, rarely twigs, lined with wool, hair, or feathers. *Eggs*: 4-6, usually 5, white, speckled or spotted, rather sparingly, with reddish brown or purplish, uniformly or chiefly in wreath about larger end. Av. size, .68 x .54 (17.3 x 13.7). *Season*: April 15-June 15; two broods.

General Range.—Pacific Coast district from Oregon to southern British Columbia and Vancouver Island; resident.

Range in Washington.—Resident west of the Cascades, chiefly at lower levels and in valleys.

Authorities.—? Townsend, Journ. Ac. Nat. Sci. Phila. VII. 1837, 154 (Columbia River). *Thriothonus bewickii* Baird, Pac. Rep. R. R. Surv. IX. 1858, p. 363 part. (T). (C&S). 12. Rh. Kb. Ra. Kk. B. E.

Specimens.—U. of W. P. Prov. B. BN. E.

TO those who are acquainted only with the typical Bewick Wren of the East, the added vocal accomplishments of our western representative come in the nature of a surprise. For to the characteristic ditty of *bewickii* proper, *calophonus* has introduced so many trills and flourishes that the original motif is almost lost to sight. *Calophonus* means having a beautiful voice, or sweetly sounding, and right well does the bird deserve the name, in a region which is all too conspicuous for its lack of notable songsters.

Nor was it at all amiss for Professor Ridgway, the eminent ornithologist of Washington, D. C., to name this bird in honor of the Queen City, for it is in the immediate environs of the city, as well as in the untidy wastes of half-conquered nature, that the local Bewick Wren finds a congenial home. Logged-off tracts, slashings and burned-over areas are, however, its especial delight, and if the bird-man catches sight of one that has been making the rounds of all the fire-blackened stumps in the neighborhood, he is ready to declare a new sub-species on the strength of the bird's soiled garments. No junk-dealer knows the alleys of the metropolis better than this crafty bird knows the byways of his log-heaps and the intricate mazes of fire-weed and fern. If there is any unusual appearance or noise which gives promise of mischief afoot, the Seattle Wren is the first to respond. Flitting, gliding, tittering, the bird comes up and moves about the center of commotion, taking observations from all possible angles and making a running commentary thereon. His attitude is alert and his movements vivacious, but the chief interest attaches to the bird's mobile tail. With this expressive member the bird is able to converse in a vigorous sign language. It is cocked up in impudence, wagged in defiance, set askant in coquetry, or depressed in whimsical token of humility. Indeed, it is hardly too much to say that the bird makes faces with its tail.

While spying along the lower levels the Wren giggles and chuckles and titters, or else gives vent to a grating cry, *moocerp*, which sets the woods on edge. But in song the bird oftenest chooses an elevated station, an alder sapling or the top of a stump. Here, at short intervals and in most energetic fashion, he delivers extended phrases of varied notes, now clear and sparkling, now slurred or pedalled. Above all, he is master of a set of smart trills. One of them, after three preliminary notes, runs *tsu' tsu' tsu' tsu' tsu' tsu'*, like an exaggerated and beautified song of the Towhee. Another song, which from its rollicking character deserves to be called a drinking song, terminates with a brilliant trill in descending scale, *rallentando et diminuendo*, as tho the little minstrel were actually draining a beaker of dew.

The Seattle Wren is altogether a hilarious personage; and in a country where most song birds are overawed by the solemnity of the forest, it is well enough to have one cheery wight to set all canons at defiance. Even the gray-bearded old fir-stubs must laugh at a time over some of the sallies of this restless little zany. The Wren does not indulge in conscious mimicry, but since his art is self-taught, he is occasionally indebted to the companions of the woods for a theme. The Towhee motif is not uncommon in his songs, and the supposed notes of a Willow Goldfinch, a little off color, were traced to his door, at Blaine.

Of the nesting Mr. Bowles says: "The building sites chosen by this wren for its nests are so variable that hardly anything can be considered typical. It may be in the wildest swampy wood far removed from civilization, but

it is quite as likely to be found in a house in the heart of a city. A few of the nesting sites I have recorded are in upturned roots of fallen trees, deserted woodpecker holes, in bird boxes in the city, in a fishing creel hanging on a porch, under a slab of bark that has scaled away a few inches from the body of a tree, or an open nest built on a beam under a bridge.

"A very complete study of this wren has convinced me that it never builds any nests except those used in raising the young. In other words, it is the only wren in the Northwest that is positively guiltless of using 'decoys'.

"In constructing the nest these birds do not often take over ten days, in which proceeding the female does all the work. One pair, however, that I visited occasionally, were over a month in completing a small nest in the natural cavity of a stump. No explanation of this seems possible, except that the female was not ready to lay her eggs any sooner.

"The nest is a rather slight affair, as a rule, the average nest containing much less material than that of any other wren that I have seen. It is composed of fine dried grass, skeleton leaves, green moss, wool, and very rarely has a basis of twigs, with a lining of hair, the cast skins of snakes, and many feathers.

"A set contains from four to six eggs, most commonly five. These are pure white in ground color, marked with fine dots of reddish brown. The markings are variable in distribution, some specimens being marked very sparingly over all, while in others the markings are largely concentrated around the larger end in the form of a more or less confluent ring. The eggs are rather short ovate oval in shape, and average in measurements .68 x .54 inches.

"Two broods are reared in a season; or perhaps it would be more correct to say that fresh eggs may be found at any time between the middle of April and the middle of June.

"Altho rather timid in the vicinity of her nest, the female generally remains on her eggs until disturbed by a jar or some loud noise. She then disappears and neither bird appears nor makes any complaint in objection to the intruder."

No. 119.

WESTERN HOUSE WREN.

A. O. U. No. 721 a. *Troglodytes aedon parkmanii* (Aud.).

Synonyms.—PARKMAN'S WREN. PACIFIC HOUSE WREN.

Description.—*Adult*: Above, grayish rufous-brown, duller and lighter on foreparts; brighter and more rufous on rump, which has concealed downy white

spots; back and scapulars barred (rarely indistinctly) with dusky; wings on exposed webs and tail all over distinctly and finely dusky-banded; sides of head speckled grayish brown, without definite pattern; below, light grayish brown, indistinctly speckled or banded with darker brownish on fore-parts; heavily speckled and banded with dusky and whitish on flanks and crissum; bill black above, lighter below; culmen slightly curved; feet brownish. Length 4.50-5.25 (114.3-133.3); wing 2.08 (52.8); tail 1.75 (44.6); bill .51 (13.1); tarsus .68 (17.2).

Recognition Marks.—Warbler size; brown above, lighter below; everywhere more or less speckled and banded with dusky, brownish, or white. Larger and with longer tail than Western Winter Wren.

Nesting.—*Nest:* of sticks and trash, lined with fine grasses or chicken-



Taken
in
Oregon.

Photo
by
Finley
and
Boschman

HOW'S THE WEATHER OUTSIDE?

feathers, placed in bird-boxes, holes in orchard trees, crannies of out-buildings, etc. *Eggs:* 4-8, white, heavily speckled, and usually more or less tinged with pinkish brown or vinaceous, with a wreath of a heavier shade about the larger end. Average size, .64 x .51 (16.3 x 13). *Season:* About May 15; one brood.

General Range.—Western United States and Canada, north to British Columbia, Alberta and Manitoba, east to Illinois, south to Mexico.

Range in Washington.—Not common summer resident, confined to lower altitudes and, usually, vicinity of settlements.

Migrations.—*Spring:* Tacoma, April 25, 1906, April 28, 1907.

Authorities.—*Troglodytes fulvus* Ornithological Committee, Journ. Ac. Nat. Sci. Phila. VII, 1837, p. 103 (Columbia River). *Troglodytes parkmanni*

Audubon, Orn. Biog. V. 1839, 310 (Columbia River). *Troglodytes parkmanni*, Aud., **Baird**, Rep. Pac. R. R. Surv. XII. pt. II. 1858, p. 368. (T.) C&S. D^r. Ra. D^r. Ss^r. Kk. J. B. E.

Specimens.—U. of W. Prov. P. B.

SINCE our country is pretty well supplied with Wrens, and those too which are content with our climate the year around, this bustling down-laster, arriving at what he considers the proper season, does not figure so largely in local bird society as across the Rockies. Altho originally described by Audubon from material secured by Townsend, at Vancouver, in the Thirties, *parkmanni* gives evidence of being a new-comer, comparatively speaking. In the first place, the late arrival, April 25th at Puget Sound points, marks the species in which the tradition of a hard climate is still strong. And, in the second place, the slightly paler plumage acquired while crossing the desert has not yet been lost, altho it is very certain that it could not long withstand consecutive centuries of residence in our humid climate. It is not surprising, therefore, that the House Wren is not abundant nor well distributed in western Washington. On the East-side it is neither common nor rare, being found about long-established ranches and wherever the presence of a little timber affords the variety of cover which is essential to its happiness.

Once upon the scene, however, a little House Wren goes a great ways. He is bursting with energy, and music escapes from his busy mandibles like steam from a safety valve. The first task is to renovate last year's quarters,



Taken in Oregon.

Photo by W. L. Finley.

A VERY BUSY WREN

NOT QUITE SO BUSY AS APPEARS, HOWEVER. THE PICTURE IS A COMPOSITE AND PRESENTS THE SAME BIRD TWICE

but there is always time on the side to explore a new brush-heap, to scold a cat, or to indulge innumerable song-bursts. In singing his joyous trill the bird reminds one of a piece of fireworks called a "cascade," for he fills the air with a brilliant bouquet of music, and is himself, one would think, nearly consumed by the violence of the effort. But the next moment the singer is carrying out last year's feather bed by great beakfuls, or lugging into some cranny sticks ridiculously large for him.

During the nesting season both birds are perfect little spitfires, assaulting mischievous prowlers with a fearlessness which knows no caution, and scolding in a voice which expresses the deepest scorn. The rasping note produced on such an occasion reminds one of the energetic use of a nutmeg grater by a determined housewife.

In nesting, the Wrens make free of the haunts of men, but are in nowise dependent on them. Old cabins afford convenient crannies, forgotten augur-holes, tin cans, bird boxes, a sleeve or pocket in an old coat hanging in the woodshed,—anything with a cavity will do; but, by the same token, an unused Woodpecker's hole, or a knot-hole in a stump miles from the haunts of men will do as well. In any case the cavity, be it big or little, must first be filled up with sticks, with just room at the top for entrance. Into this mass a deep hollow is sunk, and this is heavily lined with horse-hair, wool, feathers, bits of snake-skin, anything soft and "comfy".

Since the Western House Wren makes a brief season with us, it appears to raise but one brood annually.

No. 120.

WESTERN WINTER WREN.

A. O. U. No. 722 a. *Tannus hiemalis pacificus* (Baird).

Description.—*Adult*: Above warm dark brown, duller before, brighter on rump, sometimes obscurely waved or barred with dusky on back, wings, and tail; barring more distinct on edges of four or five outer primaries, where alternating with buffy; concealed white spots on rump scarce, or almost wanting; a pale brownish superciliary line; sides of head speckled brownish and buffy; underparts everywhere finely mottled, speckled or barred,—on the throat and breast mingled brownish (Isabella-color) and buffy, below dusky and tawny, dusky predominating over brown on flanks and crissum; bill comparatively short, straight, blackish above, lighter below; feet light brown. Length about 4.00 (101.6); wing 1.81 (46); tail 1.18 (30); bill .46 (11.6); tarsus .71 (18).

Recognition Marks.—Pygmy size; dark brown above, lighter below; more or less speckled and barred all over; tail shorter than in preceding species.

Nesting.—*Nest*: of moss and a few small twigs, lined heavily with wool, rabbits' fur, hair and feathers, placed among roots of upturned tree, or in crannies

of decayed stumps, brush-heaps, etc. *Eggs*: 4-7, usually 5, white or creamy-white, dotted finely but sparingly with reddish brown; occasionally blotched with the same; sometimes almost unmarked. Av. size .69 x .50 (17.5 x 12.7). *Season*: first week in April to first week in July according to altitude; two broods.

General Range.—Western North America, breeding from southern California to southern Alaska, east to western Montana. Chiefly resident, but south irregularly in Great Basin States and California in winter.

Range in Washington.—Resident in coniferous timber from sea level to limit of trees; less common east of the Cascade Mountains; of irregular occurrence in open country during migrations.

Authorities.—[Lewis and Clark, Hist. (1814) Ed. Biddle; Coles, Vol. II, p. 186.] ? Orn. Com. Journ. Ac. Nat. Sci. Phila. VII, 1837, 193 (Columbia River). *Troglodytes* (*Amothura*) *hyemalis* **Baird**, Rep. Pac. R. R. Surv. IX, 1858, p. 369. (T). C&S. L¹. Rh. D¹. Kb. Ra. Kk. J. B. E.

Specimens.—U. of W. P. Prov. B. BN. E.

Chick — *chick chick* — *chick chick*; it is the Winter Wren's way of saying How-do-you-do? when you invade his domain in the damp forest. The voice is a size too large for such a mite of a bird, and one does not understand its circumflexed quality until he sees its possessor making an emphatic curtsy with each utterance. It is not every day that the recluse beholds a man, and it may be that he has stolen a march under cover of the ferns and salad brush before touching off his little mine of interrogatives at your knees. If so, his brusque little being is softened by a friendly twinkle, as he notes your surprise and then darts back chuckling to the cover of a fallen log.

Again, if your entrance into the woods has been unnoticed, so that the little huntsman comes upon you in the regular way of business, it is amusing to watch with what ruses of circumvention he seeks to inspect you. Now he appears above a root on your right gawking on tiptoe; then drops at a flash behind its shelter to reprove himself in upbraiding *chick chick's* for his rashness. Then, after a minute of apprehensive silence on your part, a chuckle at your other elbow announces that the inspection is satisfactorily completed on that side. The Lilliputian has you at his mercy, Mr. Gulliver.

Dr. Cooper, writing fifty years ago, considered this the commonest species in the forests of "the Territory." With the possible exception of the Golden-crowned Kinglet, this is probably still true, since it is found not merely along streams and in romantic dells, but thruout the somber depths of the fir and spruce forests from sea level to the limit of trees. It is fond of the wilderness and has as yet learned no necessity of dependence upon man, but it by no means shuns the edges of town, if only sufficient density of cover be provided. Because of the more open character of pine timber, the Winter Wren is less common and is altogether local in its distribution east of the mountains, being confined for the most part to those forest areas which boast an infusion of fir and tamarack.

In winter, because of heavy snows, the birds appear to retire to a large extent upon the valleys and lowlands, nor do they appear to reoccupy the mountain forests until they have reared a first brood upon the lower levels. Just how familiar a species this bird is at sea-level does not appear to be generally realized. In the spring of 1905 I estimated that forty pairs were nesting in Ravenna Park

alone. Nor do they by any means desert the lowlands in toto in summer, for they are seen regularly at that season thruout Puget Sound, upon the islands of Washington Sound, and upon the West Coast.

It is the Winter Wren, chiefly, which gladdens the depths of the ancient forest with music. Partly because of its unique isolation, but more because of the joyous abandon of the little singer, the song of the Winter Wren strikes the bird-lover as being one of the most refreshing in the Northwest. It consists of a rapid series of gurgling notes and wanton trills, not very loud nor of great variety, but having all the spontaneity of bub-



Taken in Seattle

Photo by the Author

A THICKET IN RAVENNA PARK,

WESTERN WINTER WREN.

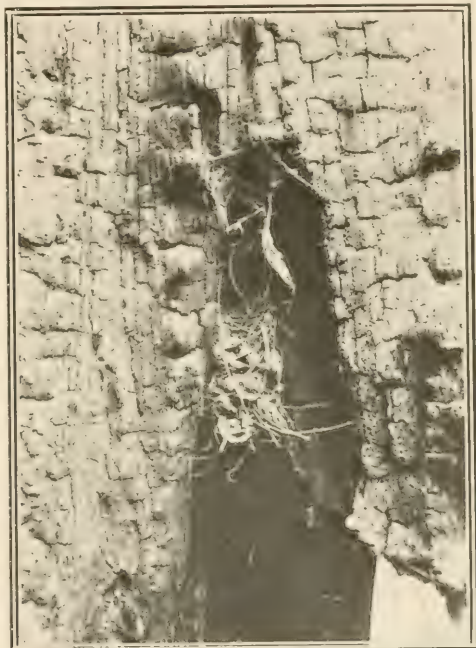
bling water, a tiny cascade of song in a waste of silence. The song comes always as an outburst, as tho some mechanical obstruction had given way before the pent-up music. Indeed, one bird I heard at Moelips preceded his song with a series of titting notes, which struck me

absurdly as being the clicking of the ratchet in a music-box being wound up for action.

Heard at close quarters the bird will occasionally employ a ventriloquial trick, dropping suddenly to *sotto voce*, so that the song appears to come from a distance. Again, it will move crescendo and diminuendo, as tho the supply pipe of this musical cascade were submitted to varying pressure at the fountain head.

A singing bird is the best evidence available of the proximity of the nest. Usually the male bird posts himself near the sitting female and publishes his domestic happiness in musical numbers. But again, he may only be pausing to congratulate himself upon the successful completion of another decoy, and the case is hopeless for the nonce.

For nesting sites the Wrens avail themselves of cubby-holes and cranies in upturned roots or fallen logs, and fire-holes in half-burned stumps. A favorite situation is one of the crevices which occur in a large fir tree when it falls and splits open. Or the nest is sometimes found under the bark of a decaying log, or in a crevice of earth in an unused mine-shaft. If the site selected has a wide entrance, this is walled up by the nesting material and only a smooth round aperture an inch and a quarter in diameter is left to admit to the nest proper. In default of any such shelter, birds have been known to construct their nests at the center of some baby fir, or in the



Taken in Seattle.

Photo by the Author

NEST OF WESTERN WINTER WREN IN CHARRED STUMP

NOTE THAT A SPIDER WEB ABOVE CLOSELY SIMULATES THE NEST ENTRANCE, WHICH IS REALLY ABOUT MIDWAY

of the crown feathers will quite win him over, so that he will accept a gently insistent finger in place of the twig which has been his support. The unfaltering trust of childhood has subdued many a savage heart, but when it is exemplified in a baby Wren one feels the ultimate appeal to tenderness.

Mr. Brown, of Glacier, coming upon an old Russet-backed Thrush nest at dusk, thrust an exploratory finger over its brim. Judge of his surprise when out swarmed seven young Winter Wrens. Mr. Brown feels reasonably sure, however, that the birds were hatched elsewhere, and that they were only roosting temporarily in the larger nest, in view of its ampler accommodations.

No. 121.

ROCK WREN.

A. O. U. No. 715. *Salpinctes obsoletus* (Say).

Description.—*Adults*: Above brownish gray changing on rump to cinnamon-brown, most of the surface speckled by arrow-shaped marks containing, or contiguous to, rounded spots of whitish; wing-quills color of back, barred with dusky on outer webs; middle pair of tail-feathers color of back barred with dusky; remaining rectrices barred with dusky on outer webs only, each with broad sub-terminal bar of blackish and tipped broadly with cinnamon-buff area varied by dusky marbling; outermost pair broadly blackish- and cinnamon-buffed on both webs; a superciliary stripe of whitish; a broad post-ocular stripe of grayish brown; sides of head and underparts dull white shading into pale cinnamon or vinaceous buff on flanks and under tail-coverts; sides of head, throat and upper breast spotted, mottled or streaked obscurely with grayish brown or dusky; under tail-coverts barred or transversely spotted with dusky. Bill dark horn-color above, paling below; feet and legs brownish dusky; iris brown. *Young birds* are more or less barred or vermiculated above, without white speckling, and are unmarked below. Length: 5.50-6.00 (139.7-152.4); wing 2.76 (70); tail 2.09 (53); bill .70 (17.7); tarsus .83 (21).

Recognition Marks.—Warbler size; variegated tail with broad buffy tips distinctive; rock-haunting habits.

Nesting.—*Nest*: in crannies of cliffs, of twigs, grasses, wool, hair and other soft substances, approached by runway of rock-chips or pebbles. *Eggs*: 5-7, white or pinkish white, sprinkled somewhat sparingly with pale cinnamon, chiefly about larger end. Av. size .73 x .56 (18.5 x 14.2). *Season*: May 1st to June 20th; two broods.

General Range.—Western United States, northern and central Mexico, and southern British Columbia, chiefly in hilly districts; eastward across Great Plains to Kansas, Nebraska, etc.; retires from northern portion of range in winter.

Range in Washington.—Summer resident and migrant in open country east

of the Cascades, chiefly confined to cliffs of Columbian lava; casual west of the Cascades.

Authorities.—["Rock wren," Johnson, Rep. Gov. W. T. 1884 (1885), p. 22.]
Lawrence, Auk, IX, 1892, 47, 357. T, L, D, D, Ss, Ss, Kk.

Specimens.—P, C.

"BU'T Barrenness, Loneliness, such-like things,
That gall and grate on the White Man's nerves,
Was the rangers that camped by the bitter springs
And guarded the lines of God's reserves.
So the folks all shy from the desert land,
'Cept mebbe a few that kin understand."—Clark.

A discerning soul is *Salpinctes*. He loves beyond all else the uplifted ramparts of basalt, the bare lean battlements of the wilderness. They are the walls of a sanctuary, where he is both verger and choir master, while upon the scarred altars which they shelter, his faithful spouse has a place "where she may lay her young."

The Rock Wren is nestled among the most impressive surroundings, but there is nothing subdued or melancholy about his bearing. Indeed, he has taken a commission to wake the old hills and to keep the shades of eld from brooding too heavily upon them. His song is, therefore, one of the sprightliest, most musical, and resonant to be heard in the entire West. The rock-wall makes an admirable sounding-board, and the bird stops midway of whatever task to sing a hymn of wildest exultation. *Whittier, whittier, whittier*, is one of his finest strains; while *ka-zehce, ka-zehce, ka-zehce* is a sort of challenge which the bird renders in various tempo, and punctuates with nervous bobs to enforce attention. For the rest his notes are too varied, spontaneous, and untrammelled to admit of precise description.

Save in the vicinity of his nest, the Rock Wren is rather an elusive sprite. If you clamber to his haunts he will remove, as matter of course, a hundred yards along the cliff; or he will flit across the couleé with a nonchalance which discourages further effort. Left to himself, however, he may whimsically return—near enough perhaps for you to catch the click, click of his tiny claws as he goes over the lava blocks, poking into crevices after spiders here, nibbling larvæ in vapor holes there, or scaling sheer heights yonder, without a thought of vertigo.

At nesting time the cliffs present a thousand chinks and hidey-holes, any one of which would do to put a nest in. The collector is likely to be dismayed at the wealth of possibilities before him, and the birds themselves appear to regret that they must make choice of a single cranny, for they "fix up" half a

dozen of the likeliest. And when it comes to lining the approaches of the chosen cavity, what do you suppose they use? Why, rocks, of course; not large ones this time, but flakes and pebbles of basalt, which rattle pleasantly every time the bird goes in and out. These rock chips are sometimes an inch or more in diameter, and it is difficult to conceive how a bird with such a delicate beak can compass their removal. Here they are, however, to the quantity of half a pint or more, and they are just as much a necessity to every well-regulated Salpinctean household, as marble steps are to Philadelphians.

The nest itself is rather a bulky affair, composed of weed-stalks, dried grasses, and fine rootlets, with a scanty lining of hair or wool (all East-side birds are enthusiastic advocates of sheep-raising). "Two broods are raised in a season, the first set of eggs appearing early in May, the second about the middle of June. It is possible that even a third set may sometimes be laid still later in the season, but these late sets are more apt to be due to the breaking up of the first or second. The eggs vary from five to seven, and are pure white in color, sprinkled rather sparingly over the surface with dots of a faint brownish red, most heavily about the larger end" (Bowles).



Taken in Douglas County.

Photo by the Author.

NESTING-SITE OF ROCK WREN IN BASALT CLIFF.

THE NEST OCCUPIES THE UPPER CRANNY BUT THE "FRONT WALK" IS COMPLETED BELOW.

Failing a suitable cliff-house—not all walls are built to Wrens' orders—the birds resort to a rock-slide and the possibilities here are infinite. After I had seen a devoted pair disappear behind a certain small rock no less than a dozen times, and had heard responsive notes in different keys, a chittering which reminded one of baby Katydid, I thought I had a cinch on the nest. The crevices of the rocks here and there were crammed with dried grass and stuff which might fairly be considered superfluous nesting material, and the young birds were too young to have traveled far; but as for the actual cradle I could not find it, and I cannot certify that the wrenlets were hatched within seven rods. The little fellows were as shy as conies, but their parents, curiously enough, took my researches good naturedly. One of them came within two feet of my face and peered intently at me as I sat motionless; and even after some square yards of the rock slide had been violently disarranged, they did not hesitate to visit their clamoring brood as tho nothing had happened. Did they trust the man or the rocks rather?

No. 122.

CANYON WREN.

A. O. U. No. 717 a. *Catherpes mexicanus conspersus* Ridgw.

Synonyms.—CANON WREN. SPECKLED CANON WREN.

Description.—*Adult*: "Upperparts brown, paler and grayer anteriorly, behind shading insensibly into rich rufous, everywhere dotted with small dusky and whitish spots. Tail clear cinnamon-brown, crossed with numerous very narrow and mostly zigzag black bars. Wing-quills dark brown, outer webs of primaries and both webs of inner secondaries barred with color of back. Chin, throat, and fore breast, with lower half of side of head and neck, pure white, shading behind through ochraceous-brown into rich deep ferruginous, and posteriorly obsoletely waved with dusky and whitish. Bill slate-colored, paler and more livid below; feet black; iris brown" (Coes). Length about 5.50 (139.7); wing 2.35 (59.7); tail 2.00 (52.4); bill .81 (20.5); tarsus .71 (18.1). Female a little smaller.

Recognition Marks.—Warbler size, rock-haunting habits; rich rusty red of hinder underparts; tail finely barred with black, its feathers without buffy tips as distinguished from *Salpinctes obsoletus*.

Nesting.—Not known to nest in Washington but probably does so. *Nest* and *eggs* indistinguishable from those of the Rock Wren.

General Range.—Central arid districts of the western United States and southern British Columbia from Wyoming and Colorado west to northeastern California and south to Arizona.

Range in Washington.—Reported from Palouse country only,—is probably

extending range into Upper Sonoran and Arid Transition zones of eastern Washington.

Authorities.—*C. mexicanus punctulatus*, Snodgrass, Auk, Vol. XXI, Apr. 1904, p. 232. J.

Specimens. 1¹.

TO Mr. Robert E. Snodgrass belongs the honor of first reporting this species as a bird of Washington. He encountered it in the Snake River Cañon at Almota in the summer of 1903, and mentions that it occurred also at Wawawai Ferry, a few miles up the river. Roswell H. Johnson also refers to it casually in the preface to his list of the birds of Cheney^a as occurring "where conditions were favorable to the south and east."

It has long been supposed that the Cañon Wrens were confined to a much more southern range. Ridgway^b assigns the northern limits of this species to Wyoming and Nevada. Its appearance in Washington, therefore, is matter of congratulation and may, perhaps, be taken as an instance of that *northward trend of species* which undoubtedly affects many of the Passerine forms, and none more notably than the Wrens.

The Cañon Wren frequents much the same situations as the Rock Wren and has the same sprightly ways. In the southern part of its range it is said to be a familiar resident of towns, and nests as frequently in crannies and bird-boxes as does our House Wren (*Troglodytes aedon parkmanii*). Its alarm note is a "peculiarly ringing *dink*," and its song is said to excel, if possible, that of the House Wren. "What joyous notes! * * * His song comes tripping down the scale growing so fast it seems as if the songster could only stop by giving his odd little flourish back up the scale again at the end. The ordinary song has seven descending notes, but often, as if out of pure exuberance of happiness, the Wren begins with a run of grace notes, ending with the same little flourish. The rare character of the song is its rhapsody and the rich vibrant quality which has suggested the name of bugler for him—and a glorious little bugler he surely is" (Mrs. Bailey).

a. "The Birds of Cheney, Washington," The Condor, Vol. VIII., Jan., 1906, p. 25 [No scientific name given].

b. "The Birds of N. and M. America," Vol. III., p. 650.

No. 123.

SAGE THRASHER.

A. O. U. No. 702. *Oroscoptes montanus* Townsend.**Synonyms.**—SAGE MOCKER. MOUNTAIN MOCKING-BIRD (early name—*inapropos*).**Description.**—*Adults*.—General plumage ashy brown, lighter below; above grayish- or ashy-brown, the feathers, especially on crown, streaked mesially with darker brown; wings and tail dark grayish brown with paler edgings; middle and greater coverts narrowly tipped with whitish, producing two dull bars; outer rectrices broadly tipped with white, decreasing in area, till vanishing on central pair; lores grayish; a pale superciliary line; cheeks brownish varied by white; underparts whitish tinged with buffy brown, most strongly on flanks and crissum, everywhere (save, usually, on throat, lower belly, and under tail-coverts) streaked with dusky, the streaks tending to confluence along side of throat, sharply distinguished and wedge-shaped on breast, where also heaviest; bill blackish paling on mandible; legs and feet dusky brownish, the latter with yellow soles; iris lemon-yellow. *Young* birds are browner and more decidedly streaked above; less distinctly streaked below. Length about 8.00 (203); wing 3.82 (97); tail 3.54 (90); bill .65 (16.4); tarsus 1.20 (30.5).**Recognition Marks.**—Chewink size; ashy-brown plumage appearing nearly uniform at distance; sage-haunting habits; impetuous song.**Nesting.**—*Nest*, a substantial structure of thorny twigs (*Sarcobatus* preferred), usually slightly domed, with a heavy inner cup of fine bark (sage) strips, placed without attempt at concealment in sage-bush or greasewood. *Eggs*, 4 or 5, rich, dark, bluish green, heavily spotted or blotched with rich rufous and "egg-gray"—among the handsomest. Av. size, .98 x .71 (24.9 x 18). *Season*: May 1-June 15; two (?) broods.**General Range.**—Western United States from western part of the Great Plains (western South Dakota, western Nebraska, and eastern Colorado) north to Montana, west to the Cascades and Sierra Nevada, south into New Mexico, Lower California, and, casually, to Guadalupe Island.**Range in Washington.**—Treeless portions of East-side; summer resident.**Authorities.**—"Sage Thrasher," Johnson, Rep. Gov. W. T. 1884 (1885), p. 22. **Dawson**, Wilson Bulletin, No. 39, June, 1902, p. 67. (T), D?, Ss?, Ss?**Specimens.**—U. of W. P. C.

It takes a poet to appreciate the desert. Those people who affect to despise the sage are the same to whom stones are stones instead of compacted histories of the world's youth, and clouds are clouds instead of legions of angels. It is no mark of genius then to despise common things. The desert has cradled more of the world's good men and great than ever were coddled in king's palaces. Whistler used to paint "symphonies in gray" and men held back questioning, "Er—is this art?" A few, bolder than their fellows, pro-

nounced favorably upon it, and it is allowable now to admit that Whistler was a great artist—that is, a great discoverer and revealer of Nature.

Nature has painted upon our eastern hills a symphony in gray greens, a canvas of artemisia, simple, ample, insistent. And still the people stand before it hesitating—it is so common—is it considered beautiful, pray? Well, at least a bird thinks so, a bird whose whole life has been spent in the sage. Listen! The hour is sunrise. As we face the east, heavy shadows still huddle about us and blend with the ill-defined realities. The stretching sage-tops tremble with oblation before the expectant sun. The pale dews are taking counsel for flight, but the opalescent haze, pregnant with sunfire, yet tender with cool greens and subtle azures, hovers over the altar waiting the concomitance of the morning hymn before ascent. Suddenly, from a distant sage-bush bursts a geyser of song, a torrent of tuneful waters, gushing, as it would seem, from the bowels of the wilderness in an ecstasy of greeting and gratitude and praise. It is from the throat of the Sage Thrasher, poet of the bitter weed, that the tumult comes. Himself but a gray shadow, scarce visible in the early light, he pours out his soul and the soul of the sage in a rhapsody of holy joy. Impetuous, impassioned, compelling, rises this matchless music of the desert. To the silence of the gray-green canvas, beautiful but incomplete, has come the throb and thrill of life,—life brimful, delirious, exultant. The freshness and the gladness of it touch the soul as with a magic. The heart of the listener glows, his veins tingle, his face beams. He cannot wait to analyze. He must dance and shout for joy. The wine of the wilderness is henceforth in his veins, and drunk with ecstasy he reels across the enchanted scene forever more.

And all this inspiration the bird draws from common sage and the rising of the common sun. How does he do it? I do not know. Ask Homer, Milton, Keats.

No. 124.

CATBIRD.

A. O. U. No. 704. *Dumetella carolinensis* (Linn.).

Description.—*Adult*: Slate-color, lightening almost imperceptibly below; black on top of head and on tail; under tail-coverts chestnut, sometimes spotted with slaty; bill and feet black. Length 8.00-9.35 (203.2-237.5); wing 3.59 (91.2); tail 3.65 (92.7); bill .62 (15.8).

Recognition Marks.—Chewink size; almost uniform slaty coloration with thicket-haunting habits distinctive; lithe and slender as compared with Water Ouzel.

Nesting.—Nest, of twigs, weed-stalks, vegetable fibers, and trash, carefully lined with fine rootlets, placed at indifferent heights in bushes or thickets. Eggs, 4-5, deep emerald-green, glossy. Av. size, .95 x .60 (24.1 x 17.5). Season, first two weeks in June; one brood.

General Range.—Eastern United States and British Provinces, west regularly to and including the Rocky Mountains, irregularly to the Pacific Coast from British Columbia to central California. Breeds from the Gulf States northward to the Saskatchewan. Winters in the southern states, Cuba, and middle America to Panama. Bermuda, resident. Accidental in Europe.

Range in Washington.—Summer resident; not uncommon but locally distributed in eastern and especially northeastern Washington; penetrates deepest mountain valleys on eastern slope of Cascades, and is regularly established in certain West-side valleys connected by low passes. Casual at Seattle, and elsewhere at sea-level.

Authorities.—*Galeoscoptes carolinensis*, **Belding**, Land Birds of the Pacific District (1860), p. 226 (Walla Walla by J. W. Williams, 1885). D^r, Ss^r, Ss^r, J.

Specimens.—U. of W. Prov. P. C.

THOSE who hold either a good or a bad opinion of the Catbird are one-sided in their judgment. Two, and not less than two, opinions are possible of one and the same bird. He is both imp and angel, a "feathered Mephistopheles" and "a heavenly singer." But this is far from saying that the bird lives a double life in the sense ordinarily understood, for in the same minute he is grave, gay, pensive and clownish. Nature made him both a wag and a poet, and it is no wonder if the roguishness and high philosophy become inextricably entangled. One moment he steps forth before you as sleek as Beau Brummel, graceful, polished, equal-eyed; then he cocks his head to one side and squints at you like a thief; next he hangs his head, droops wings and tail, and looks like a dog being lectured for killing sheep;—Presto, change! the bird pulls himself up to an extravagant height and with exaggerated gruffness, croaks out, "Who are you?" Then without waiting for an answer to his impudent question, the rascal sneaks off thru the bushes, hugging every feather close to his body, delivering a running fire of cat-calls, squawks, and expressions of contempt. There is no accounting for him; he is an irrepressible—and a genius.

The Catbird is not common in Washington, save in the northeastern portion of the State, where it is well established. Miss Jennie V. Getty finds them regularly at North Bend, and there is a Seattle record; so that there is reason to believe that the Catbird is one of those few species which are extending their range by encroachment from neighboring territory. There can be no question that civilization is conducive to the bird's welfare, primarily by increasing the quantity of its cover on the East-side, and, possibly, by reducing it on the West. Catbirds, when at home, are found in thickets and in loose shrubbery. River-banks are lined with them, and chaparral-covered hill-

sides have their share; but they also display a decided preference for the vicinage of man, and, if allowed to, will frequent the orchards and the raspberry bushes. They help themselves pretty freely to the fruit of the latter, but their services in insect-eating compensate for their keep, a hundred-fold. Nests are placed almost anywhere at moderate heights, but thickety places are preferred, and the wild rosebush is acknowledged to be the ideal spot. The birds exhibit the greatest distress when their nest is disturbed, and the entire neighborhood is aroused to expressions of sympathy by their pitiful cries.

My friend, Dr. James Ball Naylor, of Malta, Ohio, tells the following story in answer to the oft-repeated question, Do animals reason? The poet's house nestles against the base of a wooded hill and looks out upon a spacious well-kept lawn which is studded with elm trees. The place is famous for birds and the neighborhood is equally famous for cats. Robins occasionally venture to glean angle worms upon the inviting expanses of this lawn, but for a bird to attempt to cross it unaided by wing would be to invite destruction as in the case of a lone soldier climbing San Juan hill. One day, however, a fledgling Catbird, overweening and disobedient, we fear, fell from its nest overhead and sat helpless on the dreaded slopes. The parents were beside themselves with anxiety. The birdie could not fly and would not flutter to any purpose. There was no enemy in sight but it was only by the sufferance of fate, and moments were precious. In the midst of it all the mother disappeared and returned presently with a fat green worm, which she held up to baby at a foot's remove. Baby hopped and floundered forward to the juicy morsel, but when he had covered the first foot, the dainty was still six inches away. Mama promised it to him with a flood of encouragement for every effort, but as often as the infant advanced the mother retreated, renewing her blandishments. In this way she coaxed her baby across the lawn and up, twig by twig, to the top of an osage-orange hedge which bounded it. Here, according to Dr. Naylor, she fed her child the worm.

Comparing the scolding and call notes of the Catbird with the mewing of a cat has perhaps been a little overdone, but the likeness is strong enough to lodge in the mind and to fasten the bird's "trivial name" upon it forever. Besides a mellow *phut, phut* in the bush, the bird has an aggravating *mec-a-a*, and a petulant call note which is nothing less than *Ma-a-ry*. Cautious to a degree and timid, the bird is oftener heard in the depth of the thicket than elsewhere, but he sometimes mounts the tree-top, and the opening "*Phut, phut, coquilloco!*"—as Neltje Blanchan hears it—is the promise of a treat.

Generalizations are apt to be inadequate when applied to singers of such brilliant and varied gifts as the Catbird's. It would be impertinent to say: *Homo sapiens* has a cultivated voice and produces music of the highest order. Some of us do and some of us do not. Similarly some Catbirds are "self-conscious and affected," "pause after each phrase to mark its effect upon the

audience," etc. Some lack originality, feeling, are incapable of sustained effort, cannot imitate other birds, etc. But some Catbirds are among the most talented singers known. One such I remember, which, overcome by the charms of a May day sunset, mounted the tip of a pasture elm, and poured forth a hymn of praise in which every voice of woodland and field was laid under contribution. Yet all were suffused by the singer's own emotion. Oh, how that voice rang out upon the still evening air! The bird sang with true feeling, an artist in every sense, and the delicacy and accuracy of his phrasing must have silenced a much more captious critic than I. Never at a loss for a note, never pausing to ask himself what he should sing next, he went steadily on, now with a phrase from Robin's song, now with the shrill cry of the Red-headed Woodpecker, each softened and refined as his own infallible musical taste dictated; now and again he interspersed these with bits of his own no less beautiful. The carol of Vireo, the tender ditties of the Song and Vesper Sparrows, and the more pretentious efforts of Grosbeaks, had all impressed themselves upon this musician's ear, and he repeated them, not slavishly, but with discernment and deep appreciation. As the sun sank lower in the west I left him there, a dull gray bird, with form scarcely outlined against the evening sky, but my soul had taken flight with his—up into that blest abode where all Nature's voices are blended into one, and all music is praise.

*Taken near Stehekin.**Photo by the Author*

A HAUNT OF THE CATBIRD

No. 125.

AMERICAN WATER OUZEL.

A. O. U. No. 701. **Cinclus mexicanus unicolor** (Bonap.).**Synonym.**—AMERICAN DIPPER.

Description.—*Adults in spring and summer:* General plumage slaty gray paling below; tinged with brown on head and neck; wings and tail darker, blackish slate; eyelids touched with white; bill black; feet yellowish. *Adults in fall and winter, and immature:* Feathers of underparts margined with whitish and some whitish edging on wings; bill lighter, brownish. *Young birds* are much lighter below; the throat is nearly white and the feathers of remaining under plumage are broadly tipped with white and have wash of rufous posteriorly—tips of wing-feathers and, occasionally, tail-feathers extensively white; bill yellow. Length of adult 6.00-7.00 (152-178); wing 3.54 (90); tail 1.97 (50); bill .68 (17.3); tarsus 1.12 (28.5).

Recognition Marks.—Sparrow size but *chunky*, giving impression of a "better" bird. Slaty coloration and water-haunting habits distinctive.

Nesting.—*Nest:* a large ball of green moss lined with fine grasses, and with entrance on side; lodged among rocks, fallen timber, roots, etc., near water. *Eggs:* 4 or 5, pure white. Av. size, 1.02 x .70 (25.9 x 17.8). *Season:* April-June; one or two broods.

General Range.—The mountains of western North America from the northern boundary of Mexico and northern Lower California to northern Alaska. Resident.

Range in Washington.—Of regular occurrence along all mountain streams. Retires to lower levels, even, rarely, to sea-coast in winter.

Authorities.—*Cinclus mortoni*, Townsend, Narrative, April, 1839, p. 339. Also *C. townsendi* "Audubon," Ibid., p. 340. T. C&S. L¹. Rh. D¹. Ra. D². B. E.

Specimens.—Prov. B. E.

"ADVANCING and prancing and glancing and dancing,
And dashing and flashing and splashing and clashing;
And so never ending, but always descending,
Sounds and motions forever and ever are blending,
All at once and all o'er, with a mighty uproar;
And this way the Water comes down at Lodore."

But the scene of aqueous confusion was incomplete unless a leaden shape emerged from the spray, took station on a jutting rock, and proceeded to rub out certain gruff notes of greeting, *jigic, jigic, jigic*. These notes manage somehow to dominate or to pierce the roar of the cataract, and they symbolize henceforth the turbulence of all the mountain torrents of the West.

The Water Ouzel bobs most absurdly as he repeats his inquiry after your

health. But you would far rather know of his, for he has just come out of the icy bath, and as he slides down the rock, tittering expectantly, you judge he is contemplating another one. Yes; without more ado the bird wades into the stream where the current is so swift you are sure it would sweep a man off his feet. He disappears beneath its surface and you shudder at the possibilities, but after a half minute of suspense he bursts out of the seething waters a dozen feet below and flits back to his rock chuckling cheerily. This time, it may be, he will rest, and you have opportunity to note the slightly *retroussé* aspect of the beak in its attachment to the head. The bird has stopped springing now and stands as stolid as an Indian, save as ever and again he delivers a slow wink, upside down, with the white nictitating membrane.

It has been asserted that the Ouzel flies under water, but I think that this is a mistake, except as it may use its wings to reach the surface of the water after it has released its hold upon the bottom. The bird creeps and clings, rather, and is thus able to withstand a strong current as well as to attain a depth of several feet in quieter waters.

The Water Ouzel feeds largely upon the larvæ of the caddice fly, known locally as periwinkles. These are found clinging to the under surface of stones lining the stream, and their discovery requires quite a little prying and poking on the bird's part. The Ouzels are also said to be destructive to fish fry, inasmuch that the director of a hatchery in British Columbia felt impelled to order the destruction of all the Ouzels, to the number of several hundred, which wintered along a certain protected stream. This was a very regrettable necessity, if necessity it was, and one which might easily lead to misunderstanding between bird-men and fish-men. We are fond of trout ourselves, but we confess to being a great deal fonder of this adventuresome water-sprite.

The Ouzel is non-migratory, but the summer haunts of the birds in the mountains are largely closed to them in winter, so that they find it necessary at that season to retreat to the lower levels. This is done, as it were, reluctantly, and nothing short of the actual blanketing of snow or ice will drive them to forsake the higher waters. The bird is essentially solitary at this season, as in summer, and when it repairs to a lower station, along late in November, there is no little strife engendered by the discussion of metes and bounds. In the winter of 1895-6, being stationed at Chelan, I had occasion to note that the same Ouzels appeared daily along the upper reaches of the Chelan River. Thinking that such a local attachment might be due to similar occupation down stream, I set out one afternoon to follow the river down for a mile or so, and to ascertain, if possible, how many bird-squatters had laid out claims along its turbulent course. In places where there was an unusually long succession of rapids, it was not always possible to decide between the conflicting interests of rival claimants, for they flitted up and down overlapping by short flights each other's domains; but the very fact that these overlappings often occa-

sioned sharp passages at arms served to confirm the conclusion that the territory had been divided, and that each bird was expected to dive and bob and gurgle on his own beat. Thus, twenty-seven birds were found to occupy a stretch of two miles.

Here in winter quarters, the first courting songs were heard. As early as Christmas the birds began to tune up, and that quite irrespective of weather. But their utterances were as rare in time as they are in quality. In fact, it does not appear to be generally known that the Water Ouzel is a beautiful singer, and none of those who have been so fortunate as to hear its song, have heard enough to pass final judgment on it. We know, at least, that it is clear and strong and vivacious, and that in its utterance the bird recalls its affinity to both Thrushes and Thrashers.

The Ouzel places its nest beside some brawling stream, or near or behind some small cascade. In doing so, the chief solicitude seems to be that the living mosses, of which the bulky globe is composed, shall be kept moist by the flying spray, and so retain their greenness. Indeed, one observer reports that in default of ready-made conveniences, the bird itself turns sprinkler, not only alighting upon the dome of its house after returning from a trip, but visiting the water



Taken in California.

Photo by Frederick Bade.

THE LAST STATION

IN ANOTHER MOMENT THE OUZEL WILL VISIT HER BROOD UNDER THE WATERFALL

repeatedly for the sole purpose of shaking its wet plumage over the mossy nest.

Unless we mistake, the bird in the first picture is about to visit a nest behind the waterfall, and of such a nest Mr. John Keast Lord says: "I once found the nest of the American Dipper built amongst the roots of a large cedar-tree that had floated down the stream and got jammed against the mill dam of the Hudson Bay Company's old grist mill, at Fort Colville, on a tributary to the upper Columbia River. The water rushing over a jutting ledge of rocks, formed a small cascade, that fell like a veil of water before the dipper's nest; and it was curious to see the birds dash thru the waterfall rather than go in at the sides, and in that way get behind it. For hours I have sat and watched the busy pair, passing in and out thru the fall, with as much apparent ease as an equestrian performer jumps thru a hoop covered with tissue paper. The nest was ingeniously constructed to prevent the spray from wetting the interior, the moss being so worked over the entrance as to form an admirable verandah."

Of the nest shown in the accompanying illustration, Mr. A. W. Anthony says that it was completed under unusual difficulties. A party of surveyors, requiring to bridge a stream in eastern Oregon, first laid a squared stringer. This an Ouzel promptly seized upon, and in token of proprietorship began to heap up moss.

This arrangement did not comport with business and the nest foundations were brushed aside on two successive mornings. A spell of bad weather intervening, the men returned to their work some days later to find the completed nest, as shown, completed but still unoccupied. It was necessary to remove this also, but judge of the feelings of the surveyors when, upon the following morning, they found a single white egg resting upon the bare timber!



AN UNSHIELDED NEST

No. 126.

PURPLE MARTIN.

A. O. U. No. 611. *Progne subis* (Linn.).

Description.—*Adult male*: Rich, purplish black, glossy and metallic; wings and tail dead black. *Adult female*: Similar to male, but blue-black of upper-parts restricted and duller; forehead, hind-neck, and lower parts sooty gray, paler on belly and crissum. Bill black, stout, and broad at the base, decurved near tip; nostrils exposed, circular, opening upward; feet moderately stout. *Young males*: resemble adult female but are somewhat darker, the steely blue appearing at first in patches. Length 7.25-8.50 (184.2-215.9); av. of eight specimens: wing 5.75 (146.1); tail 2.72 (69.1); bill, breadth at base .73 (18.5); length from nostril .33 (8.4).

Recognition Marks.—Chewink size; the largest of the Swallows; blue-black, or blue-black and sooty-gray coloration.

Nesting.—*Nest*, of leaves, grass, and trash, in some cavity, usually artificial,—bird-boxes, gourds, etc. *Eggs*, 4-5, rarely 6, pure, glossy white. Av. size, .98 x .73 (24.9 x 18.5). *Season*, first week in June; one brood.

General Range.—Temperate North America, except southern portion of Pacific Coast district, north to Ontario and the Saskatchewan, south to the higher parts of Mexico, wintering in South America.

Range in Washington.—Not common summer resident—nearly confined to business sections of the larger cities.

Migrations.—*Spring*: c. April 15; Tacoma, April 1, 1905. *Fall*: c. Sept. 1st.

Authorities.—**Cooper and Suckley**, Rep. Pac. R. R. Surv. XII. pt. II. 1860, p. 136. (T). C&S. [L]. Rh. Ra. Kk. B. E.

Specimens.—Prov. B. E.

THIS virtually rare bird appears to be strictly confined during its summer residence with us to the business districts of our larger West-side cities. Records are in from Seattle, Tacoma, Olympia, Bellingham, Vancouver, and Victoria only. Really, if this favoritism continues, we shall begin to think of imposing a new test for cities of the first class; viz., Do the Martins nest with you?

Suckley remembers a time when, in the early Fifties, a few Martins were to be seen about the scrub oaks of the Nisqually Plains, in whose hollows and recesses they undoubtedly nested; but all Washington birds have long since adopted the ways of civilization. April 1st is the earliest return I have noted, and we are not surprised if they fail to put in an appearance before the 1st of May. Their movements depend largely upon the weather, and even if they have come back earlier they are likely to mope indoors when the weather is cold and disagreeable. The birds feed exclusively upon insects, and are thus quite at the mercy of a backward spring. Not only flies and nits are

consumed, but bees, wasps, dragon flies, and some of the larger predatory beetles as well.

The birds mate soon after arrival, and for a home they select some crevice or hidey-hole about a building. A cavity left by a missing brick is sufficient, or a station on the eave-plate of a warehouse. Old nests are renovated and new materials are brought in, straw, string, and trash for the bulk of the nest, and abundant feathers for lining. Sometimes the birds exhibit whimsical tastes. Mr. S. F. Rathbun of Seattle found a nest which was composed entirely of wood shavings mixed with string and fragments of the woven sheath which covers electric light wires.

The nest is not often occupied till June, when the birds may be most certain of finding food for their offspring; and the rearing of a single brood is a season's work. Five eggs are almost invariably the number laid, and they are of a pure white color, the shell being very little glossed and of a coarser grain than is the case with eggs of the other Swallows.

Purple Martins are very sociable birds, and a voluble flow of small talk is kept up by them during the nesting season. The song, if such it may be called, is a succession of pleasant warblings and gurglings, interspersed with harsh rubbing and creaking notes. A particularly mellow *coo, coo, coo*, recurs from time to time, and any of the notes seem to require considerable effort on the part of the performer.

It will prove to be a sad day for the Martins when the English Sparrows take full possession of our cities. The Martins are not deficient in courage, but they cannot endure the presence of the detested foreigners. The Sparrows are filthy creatures, and it may be that the burden of the vermin, which they invariably introduce to their haunts, bears more heavily upon the skins of our more delicately constituted citizens than upon their own swinish hides.

No. 127.

CLIFF SWALLOW.

A. O. U. No. 612. *Petrochelidon lunifrons* (Say).

Synonyms.—FAVE SWALLOW. REPUBLICAN SWALLOW.

Description.—*Adult*: A prominent whitish crescent on forehead; crown back, and an obscure patch on breast steel-blue; throat, sides of head, and nape deep chestnut; breast, sides, and a cervical collar brown-gray; belly white or whitish; wings and tail blackish; rump pale rufous,—the color reaching around on flanks; under tail-coverts dusky. *In young birds* the frontlet is obscure or wanting; the plumage dull brown above, and the throat blackish with white specks. Bill and feet weak, the former suddenly compressed at tip. Length 5.00-6.00 (127-152.4); wing 4.35 (110.5); tail 2.00 (50.8); bill from nostril .22 (5.6).

Recognition Marks.—"Warbler size," but comparison inappropriate,—better say "Swallow size"; white forehead and rufous rump. Found in colonies.

Nesting.—*Nest*, an inverted stack-shaped, or declined retort-shaped structure of mud, scantily or well lined with grass, and depending from the walls of cliffs, sides of barns under the eaves, and the like. *Eggs*, 4-5, white, spotted, sometimes scantily, with cinnamon- and rufous-brown. Av. size, .82 x .55 (20.8 x 14). *Season*, May 25-June 25.

General Range.—North America, north to the limit of trees, breeding southward to the Valley of the Potomac and the Ohio, southern Texas, southern Arizona, and California; Central and South America in winter. Not found in Florida.

Range in Washington.—Summer resident, abundant but locally distributed east of Cascades; much less common in Puget Sound region.

Migrations.—*Spring*: April 15-30. *Fall*: first week in Sept. Tacoma, April 4, 1908.

Authorities.—*Hirundo lunifrons*, Say, **Cooper and Suckley**, Rep. Pac. R. R. Surv. XII. 1860, 184. T. C&S. D¹. Kb. Ra. D². Ss¹. Ss². J. B. E.

Specimens.—Prov. P. C.

FEW birds serve to recall more accurately a picture of sequestered grandeur and primeval peace than do these amiable tenants of Washington's



Taken in Douglas County.

THE CLIFF DWELLERS.

Photo by the Author

very limited seab lands. It is true that certain Cliff Swallows, following the example of their weaker eastern brethren, have taken to nesting under the eaves of churches and barns and outbuildings, but they are a negligible quantity in comparison with the swarms which still resort to the ancestral "breaks" of the Columbia gorge and the weird basaltic coulees of Douglas County.

The particular nesting site may be a matter of a season's use, populous this year and abandoned the next; but somewhere along this frowning face of basaltic columns Swallows were nesting before old Chief Moses and his copper-colored clans were displaced by the white man. Soon after the retreating ice laid bare the fluted bastions of the Grand Coulee, I think, these fly-catching cohorts swept in and established a northern outpost, an outpost which was not abandoned even in those degenerate days when deer gave way to cayuses, cayuses to cattle, and cattle to sheep and fences—fences, mark you, on the Swallow's domain!

Evidence of this age-long occupation of the lava-cliff is furnished not only by the muddy cicatrices left by fallen nests, but, wherever the wall juts out or overhangs, so as to shield a place below from the action of the elements, by beds of guano and coprolitic stalagmites, which cling to the uneven surface of the rock. Judged by the same testimony, certain of the larger blow-holes, or lava-bubbles, must be used at night as lodging places, at least out of the nesting season.

The well-known bottle- or retort-shaped nests of the Cliff Swallow are composed of pellets of mud deposited in successive beakfuls by the industrious birds. It is always interesting to see a twittering company of these little masons gathering by the water's edge and moulding their mortar to the required consistency. Not less interesting is it to watch them lay the foundations upon some smooth rock facet. Their tiny beaks must serve for hods and trowels, and because the first course of mud masonry is the most particular, they alternately cling and flutter, as with many prods and fairy thumps they force the putty-like material to lay hold of the indifferent wall.

There is usually much passing to and fro in the case of these cliff-dwellers, and we can never hope to steal upon them unawares. When one approaches from below, an alarm is sounded and anxious heads, wearing a white frown, are first thrust out at the mouths of the bottles, and then the air becomes filled with flying Swallows, charging about the head of the intruder in bewildering mazes and raising a babble of strange frangible cries, as tho a thousand sets of toy dishes were being broken. If the newcomer appears harmless, the birds return to their eggs by ones and twos and dozens until most of the company are disposed again. At such a moment it is great sport to set up a sudden shout. There is an instant hush, electric, ominous, while every little Injun of them is making for the door of his

wigwam. Then they are dislodged from the cliff like an avalanche of missiles, a silent, down-sweeping cloud; but immediately they gain assurance in the open and bedlam begins all over again.

The Cliff Swallows are, of course, beyond the reach of all four-footed enemies, but now and again a June rain-storm comes at the cliff from an unexpected quarter and plays sad havoc with their frail tenements. Besides



A NESTING CLIFF, FROM BELOW.

this (in strictest confidence; one dislikes to pass an ill word of a suffering brother) the nests are likely to be infested with bed-bugs. Not all, of course, are so afflicted, but in some cases the scourge becomes so severe that the nest is abandoned outright, and eggs or young are left to their fate. In spite of this compromising weakness, the presence of these Swallows confers an incalculable benefit upon the farmer of eastern Washington, in that they alone are able to cope with a host of winged insect pests. They race tirelessly to and fro across the landscape, weaving a magic tapestry of search, until it would seem that not a cubic inch of atmosphere remains without its invisible thread of flight.

ROUGH-WINGED SWALLOW.

A. O. U. No. 617. *Stelgidopteryx serripennis* (Aud.).

Description.—*Adult*: Warm brownish gray or snuff-brown, including throat and breast; thence passing insensibly below to white of under tail-coverts; wings fuscous. *Young birds* exhibit some rusty edging of the feathers above, especially on the wings, and lack the peculiar, recurved hooks on the edge of the outer primary. Size a little larger than the next. Length 5.00-5.75 (127-146.1); wing 4.30 (100.2); tail 1.85 (47); bill from nostril .21 (5.3).

Recognition Marks.—Medium Swallow size; throat not white; warmish brown coloration, and brownish suffusion below fading to white on belly. It is easy to distinguish between this and the succeeding species if a little care is taken to note the general pattern of underparts.

Nesting.—*Nest*, in crevices of cliffs, at end of tunnels in sand banks, or in crannies of bridges, etc.; made of leaves, grasses, feathers, and the like,—bulky or compact according to situation. *Eggs*, 4-8, white. *Av. size*, .74 x .51 (18.8 x 13). *Season*: May 20-June 5, June 20-July 10; two broods.

General Range.—United States at large, north to Connecticut, southern Ontario, southern Minnesota, British Columbia, etc., south thru Mexico to Costa Rica. Breeds thruout United States range and south in Mexico.

Range in Washington.—Summer resident, of general distribution, save in mountains, thruout the State. More common east of the mountains, where it has taken a great fancy to banks of irrigating ditches, especially where abrupt.

Migrations.—*Spring*: First week in April; Tacoma, April 3, 1905, April 6, 1906 and 1908. *Fall*: c. Sept. 1.

Authorities.—*Cotyle serripennis*, Bonap. **Baird**, Rep. Pac. R. R. Surv. IX, pt. II, 1858, 314. C&S, L(?) L. Rh. Ra. J. B. E.

Specimens.—(U. of W.) Prov. P. B. E.

IT not infrequently happens that some oversight, or want of discrimination, on the part of early observers condemns a species to long obscurity or unending misapprehension. The Bank Swallow was at once recognized by the pioneer naturalists of America as being identical with the well-known European bird, but it was not till 1838 that Audubon distinguished its superficially similar but structurally different relative, the Rough-wing. The cloak of obscurity still clings to the latter, altho we begin to suspect that it may from the first have enjoyed its present wide distribution East as well as West. Hence, in describing it, we take the more familiar Bank Swallow as a point of departure, and say that it differs thus and so and so.

In the first place it has those curious little hooklets on the edge of the wing (especially on the outer edge of the first primary)—nobody knows what they are for. They surely cannot be of service in enabling the bird to cling to

perpendicular surfaces, for they are bent forward, and the bird is not known to cling head-downward. It is easy to see how the bird might brace its wings against the sides of its nesting tunnel to prevent forcible abduction, but no one knows of a possible enemy which might be circumvented in this way.

Again, the Rough-winged Swallow has a steadier, rather more labored flight than that of its foil. Its aerial course is more dignified, leisurely, less impulsive and erratic. In nesting, altho it may include the range of the Sand Martin, or even nest side by side with it, it has a wider latitude for choice and



in Oregon.

Photo by H. T. Bohman and W. I.

BABY ROUGH-WINGS

is not hampered by local tradition. If it burrows in a bank it is quite as likely to dig near the bottom as the top. Crevices in masonry or stone quarries, crannies and abutments of bridges or even holes in trees, are utilized. In Lincoln County where cover is scarce and the food supply attractive, I found them nesting along irrigating ditches with banks not over two feet high. One guileless pair I knew excavated a nest in the gravelly bank of an ungraded lot only three feet above the sidewalk of a prominent street, Denny Way, in Seattle. These birds were unsuccessful, but another pair, which enjoyed the

protection of some sturdy fir roots below ground, brought off a brood on Fifty-fifth Street, near my home.

Unlike the Bank Swallows, the Rough-wings do not colonize to any great extent, but are rather solitary. Favorable conditions may attract several pairs to a given spot, as a gravel pit, but when together they are little given to community functions.

These Swallows are pretty evenly distributed thruout the length and breadth of the State, save that they do not venture into high altitudes. Since they are so catholic in taste, it would seem that they are destined to flourish. They are possibly now to be considered, after the Cliff Swallow, the most numerous species. I found them regularly along the west Olympic Coast in the summer of 1906; and, with Mr. Edson, of Bellingham, in June, 1905, found a single pair nesting in characteristic isolation on Bare Island, off Waldron.

Further than this, the bird under consideration resembles the other bird quite closely in notes, in habits, and in general appearance, and requires sharp distinction in accordance with the suggestions given above under "Recognition Marks."

No. 129.

BANK SWALLOW.

A. O. U. No. 616. *Riparia riparia* (Linn.).

Synonym.—SAND MARTIN.

Description.—*Adult*: Upperparts plain, brownish gray; wings tawny; throat and belly white; a brownish gray band across the breast; a tiny tuft of feathers above the hind toe. There is some variation in the extent of the pectoral band; it is sometimes produced indistinctly backward, and sometimes even interrupted. Length 5.00-5.25 (127-133.3); wing 3.95 (100.3); tail 1.97 (50); bill from nostril .20 (5.1).

Recognition Marks.—Smallest of the Swallows; throat white; brownish gray pectoral band on white ground.

Nesting.—*Nest*, at end of tunnels in banks, two or three feet in; a frail mat of straws and grasses and occasionally feathers. Breeds usually in colonies. *Eggs*, 4-6, sometimes 7, pure white. *Av. size*, .70 x .49 (17.8 x 12.5). *Season*: June; one brood.

General Range.—Northern Hemisphere; in America south to West Indies, Central America, and northern South America; breeding from the middle districts of the United States northward to about the limit of trees.

Range in Washington.—Summer resident; not common. A few large colonies are known east of the Cascades; westerly they are rare or wanting.

Migrations.—*Spring*: May 11, 1896, Chelan.

Authorities.—*Clivicola riparia*, Dawson, Auk, Vol. XIV, April, 1897, p. 179.
T. [L.] D., Kh. D., Kk. B., E., H.,

Specimens.—Prov. C.



BANK SWALLOW.

THOSE who know, conceive a regard for this plain-colored bird which is quite out of keeping with its humble garb and its confessedly prosy ways. The fact is, we have no other bird so nearly cosmopolitan, and we of the West, who are being eternally reminded of our newness, and who are, indeed, upon the alert for some new shade of color upon the feather of a bird for each added degree of longitude, take comfort in the fact that here at least is an un-

changeable type, a visible link between Stumptown-on-Swinomish and Florence on the Arno. Birds of precisely this feather are summering on the Lena, or else hawking at flies on the sunny Gaudalquivir, or tunneling the sacred banks of the Jordan; and the flattery is not lost upon us of such as still prefer the Nespilum and the Pilchuck.

The life of a Swallow is so largely spent a-wing, that our interest in centers even more than in the case of other birds upon the time when it is bound to



NESTING SITE OF THE BANK SWALLOW.

earth by family ties. We are scarcely conscious of the presence of the Bank Swallow until one day we see a great company of them fluttering about a sand bank which overlooks the river, all busily engaged in digging the tunnels which are to shelter their young for that season. These birds are regularly gregarious, and a nesting colony frequently numbers hundreds.

The birds usually select a spot well up within a foot or two of the top of a nearly perpendicular bank of soil or sand, and dig a straight, round tunnel three or four feet long. If, however, the soil contains stones, a greater length may be required to reach a safe spot for the slight enlargement above the main passage. The bird appears to locate the path with

its closed beak, swaying from side to side the while; and, of course, fallen dirt or sand is carried out in the mouth. Sometimes the little miner finds a lens-shaped tunnel more convenient, and I have seen them as much as seven inches in width and only two in height. While the members of a colony, especially if it be a small one, usually occupy a straggling, horizontal line of holes, their burrows are not infrequently to be seen in loose tiers, so that the bank presents a honey-combed appearance.

Communal life seems a pleasant thing to these Swallows, and there is usually a considerable stir of activity about the quarters. A good deal of social twittering also attends the unending gyrations. The wonder is that the rapidly moving parts of this aerial kaleidoscope never collide, and that the cases of turning up at the wrong number are either so few or so amicably adjusted. The nesting season is, however, beset with dangers. Weasels and their ilk sometimes find entrance to the nesting burrows, and they are an easy prey to underbred small boys as well. The undermining of the nesting cliff by the swirling river sometimes precipitates an entire colony—at least its real and personal property—to destruction.

A certain populous bank near Chelan faced west, and whenever the west wind blew, the fine volcanic ash, which composed the cliff, was whirled into the mouths of the burrows, so rapidly, indeed, that the inmates required to be frequently at work in order to maintain an exit. A few dessicated carcasses, which I came across in old, filled-up burrows, I attributed to misfortune in this regard.

Bank Swallows are the least musical of the Swallow kind,—unless, perhaps, we except the Rough-winged species, which is naturally associated in mind with this. They have, nevertheless, a characteristic twitter, an unmelodious sound like the rubbing together of two pebbles. An odd effect is produced when the excited birds are describing remonstrant parabolas at an intruder's head. The heightened pitch in the tones of the rapidly approaching bird, followed instantly by the lower tone of full retreat, is enough to startle a slumbering conscience in one who meditates mischief on a Swallow's home.

No. 130.

AMERICAN BARN SWALLOW.

A. O. U. No. 613. *Hirundo erythrogastra* Bodd.

Synonyms.—AMERICAN BARN SWALLOW. FORK-TAILED SWALLOW.

Description.—*Adult*: Above lustrous steel-blue; in front an imperfect collar of the same hue; forehead chestnut; lores black; throat and breast rufous; the remaining underparts, including lining of wings, more or less tinged with

the same, according to age and season; wings and tail blackish, with purplish or greenish reflections; tail deeply forked, the outer pair of feathers being from one to two inches longer, and the rest graduated; white blotches on inner webs (except on middle pair) follow the bifurcation. *Immature*: Forehead and throat paler; duller or brownish above; lateral tail-feathers not so long. Length about 7.00 (177.8); wing 4.75 (120.6); tail 3.00-4.50 (76.2-114.3); bill from no-tril .24 (6.1).

Recognition Marks.—Aërial habit; rufous of throat and underparts; *forked tail*; nest usually *inside* the barn.

Nesting.—*Nest*: a neat bracket or half-bowl of mud, luxuriously lined with grass and feathers, and cemented to a beam of barn or bridge. In Washington still nests occasionally in original haunts, viz., cliffs, caves, and crannied sea-walls. *Eggs*: 3-6, of variable shape,—oval or elongated; white or pinkish white and spotted with cinnamon or umber. Av. size .76 x .55 (19.3 x 14). *Season*: last week in May and first week in July; two broods. Stehekin, Aug. 10, 1896, 4 eggs.

General Range.—North America at large. Perhaps the most widely and generally distributed of any American bird. Winters in Central and South America.

Range in Washington.—Summer resident of regular occurrence at lower levels throught the State, less common west of the Cascades, more common elsewhere in the older settled valleys.

Migrations.—*Spring*: c. May 1st; Yakima County, April 27, 1907; May 3, 1908. *Fall*: c. September 10th; Seattle, September 20, 1907.

Authorities.—*Hirundo horreorum* Benton, **Cooper and Suckley**, Rep. Pac. R. R. Surv. XII., pt. II., 1866, p. 184. T. C&S. L. Rh. D. Kb. Ra. D. S. S. J. B. E.

Specimens.—Prov. Pl. C. E.

ONE hardly knows what quality to admire most in this boyhood's and life-long friend, the Barn Swallow. All the dear associations of life at the old farm come thronging up at sight of him. You think of him somehow as a part of the sacred past; yet here he is today as young and as fresh as ever, bubbling over with springtime laughter, ready for a frolic over the bee-haunted meadows, or willing to settle down on the nearest fence-wire and recount to you with sparkling eyes and eloquent gesture the adventures of that glorious trip up from Mexico.

Perhaps it is his childlike enthusiasm which stirs us. He has come many a league this morning, yet he dashes in thru the open doors and shouts like a boisterous schoolboy, "Here we are, you dear old barn; arn't we glad to get back again!" Then it's out to see the horse-pond; and down the lane where the cattle go, with a dip under the bridge and a few turns over the orchard—a new purpose, or none, every second—life one full measure of abounding joy!

Or is it the apotheosis of motion which takes the eye? See them as they cast a magic spell over the glowing green of the young alfalfa, winding about in the dizzy patterns of a heavenly ballet, or vaulting at a thought to snatch an

insect from the sky. Back again, in again, out again, away, anywhere, everywhere, with two-mile a minute speed and effortless grace.

But it is the sweet confidingness of this dainty Swallow which wins us. With all the face of Nature before him he yet prefers the vicinage of men, and comes out of his hilly fastnesses as soon as we provide him shelter. We all like to be trusted whether we deserve it or not. And if we don't deserve it; well, we will, that's all.

The Barn Swallow is not a common bird with us as it is east of the Rockies, nor is it evenly distributed thruout our State. Wherever the country is well settled it is likely, but not certain, to be found; while for the rest it is confined to such lower altitudes as afford it suitable shelter caves and nesting cliffs.

At the head of Lake Chelan in 1895 I found such a primitive nesting haunt. The shores of the lake near its head are very precipitous, since Castle Mountain rises to a height of over 8,000 feet within a distance of two miles. Along the shore-line in the side of the cliffs, which continue several hundred feet below the water, the waves have hollowed out crannies and caves. In one of these latter, which penetrates the granite wall to a depth of some twenty feet, I found four or five Barn Swallows' nests, some containing young, and two, altho it was so late in the season (July 9, 1895), containing eggs. Other nests were found in neighboring crannies outside the cave. A visit paid to this same spot on August 10th, 1896, discovered one nest still occupied, and this contained four eggs.

Mr. F. S. Merrill, of Spokane, reports



Taken near Spokane.

Photo by F. S. Merrill.

NEST OF BARN SWALLOW.

the Barn Swallow as nesting along the rocky walls of Hangman's Creek, in just such situations as Cliff Swallows would choose; and back in '89, I found a few associated with Violet-greens along the Natchez Cliffs, in Yakima County.

A colony of some twenty pairs may be found yearly nesting on Destruction Island, in the Pacific Ocean. A few of them still occupy wave-worn crannies in the sand-rock, overlooking the upper reaches of the tide, but most of the colony have taken refuge under the broad gables of the keepers' houses.

The nest of the Barn Swallow is quadrispherical, or bracket-shaped, with an open top; and it usually depends for its position upon the adhesiveness of the mud used in construction. Dr. Brewer says of them: "The nests are constructed of distinct layers of mud, from ten to twelve in number, and each separated by strata of fine dry grasses. These layers are each made up of



Taken in Blaine.

From a Photograph Copyright, 1908, by W. L. Dawson

THE NOONING.
BARN SWALLOWS ON TELEGRAPH WIRES.

small pellets of mud, that have been worked over by the birds and placed one by one in juxtaposition until each layer is complete." The mud walls thus composed are usually an inch in thickness, and the cavity left is first lined with fine soft grasses, then provided with abundant feathers, among which the speckled eggs lie buried and almost invisible.

Bringing off the brood is an event which may well arrest the attention of the human household. There is much stir of excitement about the barn. The anxious parents rush to and fro shouting *tisic, tisic*, now in encouragement, now in caution, while baby number one launches for the nearest beam. The pace is set, and babies number two to four follow hotly after, now lighting safely, now landing in the hay-mow, or compromising on a plow-handle. Upon the last-named the agonized parents urge another effort, for Tabby may appear at any moment. He tries, therefore, for old Nellie's back, to the mild astonishment of that placid mare, who presently shakes him off. Number five tumbles outright and requires to be replaced by hand, if you will be so kind. And so the tragi-comedy wears on, duplicating human years in half as many days, until at last we see our Swallows among their twittering fellows strung like notes of music on the far-flung staff of Western Union.

If birds really mean anything more to us than so many Japanese kites flown without strings, we may surely join with Dr. Brewer in his whole-souled appreciation of these friendly Swallows: "Innocent and blameless in their lives, there is no evil blended with the many benefits they confer on man. They are his ever constant benefactor and friend, and are never known even indirectly to do an injury. For their daily food and for that of their offspring, they destroy the insects that annoy his cattle, injure his fruit trees, sting his fruit, or molest his person. Social, affectionate and kind in their intercourse with each other; faithful and devoted in the discharge of their conjugal and parental duties; exemplary, watchful, and tender alike to their own family and to all their race; sympathizing and benevolent when their fellows are in any trouble,—these lovely and beautiful birds are bright examples to all, in their blameless and useful lives."

No. 131.

TREE SWALLOW.

A. O. U. No. 614. *Iridoprocne bicolor* (Vieill.).

Synonym.—WHITE-BELLIED SWALLOW.

Description.—*Adult male*: Above, lustrous steel-blue or steel-green; below, pure white; lores black; wings and tail black, showing some bluish or greenish luster; tail slightly forked. *Female*: Similar to male, but duller. *Immature*: Upper parts mouse-gray instead of metallic; below whitish. Length about 6.00 (152.4); wing 4.57 (116.1); tail 2.19 (55.6); bill from nostril .25 (6.4).

Recognition Marks.—Aërial habits; steel-blue or greenish above; pure white below; a little larger than the next species.

Nesting.—*Nest*: in holes in trees or, latterly, in bird houses, plentifully lined

with soft materials, especially feathers. *Eggs*: 4-6, pure white,—pinkish white before removal of contents. Av. size .75 x .54 (19.1 x 13.7). *Season*: last week in May, first week in July; two broods.

General Range.—North America at large, breeding from the Fur Countries south to New Jersey, the Ohio Valley, Kansas, Colorado, California, etc.; wintering from South Carolina and the Gulf States southward to the West Indies and Guatemala.

Range in Washington.—Summer resident; abundant on West-side; not common east of the Cascade Mountains.

Migrations.—*Spring*: First week in March or earlier; Seattle, March 4, 1889; March 7, 1890; Tacoma, March 2, 1907; March 3, 1908; Bellingham (Edson), Tacoma (Bowles), Steilacoom (Dawson), February 25, 1905; Skagit Marshes near Fir (L. R. Reynolds), February 1, 1906; Seattle (Dr. Clinton T. Cooke), January 21, 1906.

Authorities.—*Hirundo bicolor* Vieillot, **Baird**, Rep. Pac. R. R. Surv. IX., pt. II., 1858, p. 311. T. C&S. Rh. D^r. Kb. Ra. D^r. J. B. E.

Specimens.—U. of W. P. Prov. C.

ONE Swallow does not make a summer, but a little twittering company of them faring northward makes the heart glad, and fills it with a sense of exaltation as it responds to the call of these care-free children of the air. The remark applies to Swallows in general, but particularly to Tree Swallows, for in their immaculate garb of dark blue and white, they seem like crystallizations of sky and templed cloud, grown animate with the all-compelling breath of spring. They have about them the marks of high-born quality, which we cannot but admire as they spurn with a wing-stroke the lower

strata, and rise to accept we know not what dainties of the upper air.

While not so hardy as Robin and Bluebird, since it must maintain an exclusive diet of insects, Tree Swallow is, occasionally, very venturesome as to the season of its northward flight. Indeed a succession of mild win-



Taken in Seattle.

Photo by the Author.

TREE SWALLOW.

ters might induce it to become a permanent resident of the Puget Sound country, and it is not certain that it has not already done so in some instances. It often reaches Seattle during the first week in March; while it was simultaneously observed at Tacoma (Bowles), and Bellingham (Edson) on the 24th day of February, 1905. In 1906 Mr. L. R. Reynolds reported seeing it in numbers on the Skagit marshes near Fir, on the 1st of February; and Dr. Clinton T. Cooke, looking from his office window in the Alaska Building, saw a large specimen, apparently an adult male, soaring about over the Grand Opera House, in Seattle, on the 21st day of January.

The Tree Swallow is a lover of the water and is seldom to be found at a great distance from it. It is close to the surface of ponds and lakes that the earliest insects are to be found in spring, and it is here that the bird may maintain the spotlessness of its plumage by frequent dips. Hence a favorite nesting site for these birds is one of the partially submerged forests which are so characteristic of western Washington lakes. The birds are not themselves able to make excavations in the wood, but they have no difficulty in possessing themselves of the results of other birds' labors. Old holes will do if not too old, but I once knew a pair of these Swallows to drive away a pair of Northwest Flickers from a brand new nesting-hole, on the banks of Lake Union, and to occupy it themselves.

The nesting cavity is copiously lined with dead grass and feathers; and sometime during the last week of May from four to six white eggs are deposited. The female sits very closely and it is sometimes necessary to remove her by hand in order to examine the nest. Both parents are very solicitous on such occasions, and should a feather from the nest be tossed into the air, one of them will at once catch it and fly about awaiting a chance to replace it. Or if there are other Swallows about, some neighbor will snatch it first and make off with it to add to her own collection.

Tree Swallows are slowly availing themselves of artificial nesting sites. In fact, several species of our birds have become quite civilized, so that nowadays no carefully constructed and quietly situated bird-box need be without its spring tenant. A pair once built their nest in a sort of tower attic, just inside a hole which a Flicker had pierced in the ceiling of an open belfry of a country church in Yakima. When in service the mouth of the swinging bell came within two feet of the brooding bird. One would suppose that the Swallows would have been crazed with fright to find themselves in the midst of such a tumult of sound; but their enterprise fared successfully, as I can testify, for at the proper time I saw the youngsters ranged in a happy, twittering row along the upper rim of the bell-wheel.

VIOLET-GREEN SWALLOW.

A. O. U. No. 615. *Tachycineta thalassina lepida* (Mearns).

Synonym.—NORTHERN VIOLET-GREEN SWALLOW.

Description.—*Adult male*: Upperparts, including pileum, hind-neck, back, upper portion of rump, scapulars, and lesser wing-coverts, rich velvety bronze-green, occasionally tinged with purple, crown usually more or less contrasting with color of back, greenish-brown rather than bronze-green, and more strongly tinged with purple; a narrow cervical collar, lower rump, and upper tail-coverts, velvety violet-purple; wings (except lesser coverts) and tail blackish glossed with violet or purple; lores grayish; underparts, continuous with cheeks and area over and behind eye, and with conspicuous flank patch, nearly meeting fellow across rump, pure white; under wing-coverts pale gray, whitening on edge of wing. Bill black; feet brownish black; iris brown. *Adult female*: Like male but usually much duller, bronze-green of upperparts reduced to greenish brown, or brown with faint greenish reflections. *Young birds* are plain mouse-gray above and their inner secondaries are touched with white. Length 4.50-5.50 (114.3-139.7); wing 4.41 (112); tail 1.77 (45); bill .20 (5.2).

Recognition Marks.—Smaller; green and violet above, white below; white-checked and white-rumped (apparently) as distinguished from the Tree Swallow.

Nesting.—*Nest*: of dried grasses with or without feathers, placed in crevice of cliff or at end of vapor hole in basalt walls; latterly in bird boxes and about buildings. *Eggs*: 4-6, pure white. Av. size .72 x .48 (18.3 x 12.2). *Season*: June.

General Range.—Western United States, from the eastern base of the Rocky Mountains to the Pacific, north to the Yukon Valley, south in winter to Costa Rica.

Range in Washington.—Summer resident, of regular occurrence in mountain valleys and among the foothills; rare or local elsewhere; becoming common in the larger cities.

Migrations.—*Spring*: "About the 10th of May" (Suckley)¹; now at least March; Chelan, March 27, 1896; Seattle, March 24, 1906; Tacoma, March 10, 1907; March 14, 1908; Olympia, February 27(?), 1897.

Authorities.—? Ornith. Com. Ac. Nat. Sci. Phila., VII., 1837, 193 (Columbia River). *Hirundo thalassina* Swainson, *Baird*, Rep. Pac. R. R. Surv. IX., pt. II., 1858, p. 312. T. C&S. L¹, Rh. D¹, D², S¹, Kk. J. B. E.

Specimens.—(U. of W.) Prov. P¹, C. E.

TO appear to the best advantage this dainty sky-child should be seen on a bright day, when the livid green of back and crown may reflect the glancing rays of the sun with a delicate golden sheen. At such a time, if one is clambering about the walls of some rugged granite cliff of the lower Cascades, he feels as if the dwellers of Olympus had come down in appropriate guise to

¹ Cooper and Suckley, Rep. Pac. R. R. Surv. XII., pt. II., 1856, p. 185.

VIOLET-GREEN SWALLOW

SLATE 4711 NATURAL SET

FROM A WATER-COLORED PAINTING BY ALEX. HENDERSON



inquire his business. Not, however, that these lovely creatures are either meddlesome or shrewish. Even when the nest is threatened by the strange presence, the birds seem unable to form any conception of harm, and pursue their way in sunny disregard. Especially pleasing to the eye is the pure white

of the bird's underparts, rising high on flanks and cheeks and sharply contrasting with the pattern of violet and green, in such fashion that, if Nature had invited us to "remold it nearer to the heart's desire," we must have declined the task.

Before the advent of the white man upon Puget Sound, these birds commonly nested in deserted woodpecker holes and in natural cavities of trees, while upon the East-side they nested (and still do to a large extent) upon the granite or lava cliffs. In the last-named situations they utilize the rocky clefts and in accessible crannies, and are especially fond of the smaller vapor holes which characterize the basaltic formations. Favorable circumstances



Taken in Oregon. Photo by Finley and Bohlman.

YOUNG VIOLET-GREEN SWALLOW.

may attract a considerable colony, to the number of a hundred pairs or more, but even so it is not easy to find a getatable nest. If one is able to reach the actual nesting site, the mouth of the ancient gas-vent which the birds have chosen for a home may prove too small to admit the hand.

Thruout the State, however, and especially upon the West-side, these exquisite birds are forsaking their ancient haunts and claiming protection of men. Already they have become common in larger cities, where they occupy bird-boxes and crannies of buildings. South Tacoma, being nearest to their old oak nurseries, is quite given over to them, and it is a pretty sight on a sunny day in April to see them fluttering about the cottages inspecting knot-holes and recessed gables or, in default of such conveniences, daintily voicing their disapproval of such neglect on the part of careless humans.

In these birds and in the Barn Swallows, the well known twittering and creaking notes of Swallows most nearly approach the dignity of song. Indeed, Mr. Rathbun contends that the song heard at close quarters is a really creditable affair, varied, vivacious, and musical.

The Violet-greens are somewhat less hardy or venturesome than the Tree Swallows, arriving usually during the last week in March. Last year's

nesting site becomes at once the spring rendezvous, but the duties of maternity are not seriously undertaken until about the 1st of June. At the head of Lake Chelan some twenty pairs of these Swallows, having left the old nesting cliff a mile away, had engaged quarters at Field's Hotel, being assigned to the boxed eaves of a second-story piazza in this pleasant caravanserai; but they had not yet deposited eggs on the 20th of June, 1906.

Altho not formerly so fastidious—I have found cliff nests composed entirely of dried grass—these birds have become connoisseurs in upholstery of feathers, and their unglossed white eggs, five or six in number, are invariably smothered in purloined down, until we begin to suspect that our fowls rather than our features have favored our adoption.

No. 133.

BOHEMIAN WAXWING.

A. O. U. No. 618. *Bombycilla garrula* (Linn.).

Synonyms.—NORTHERN WAXWING. GREATER WAXWING.

Description.—*Adults*: A conspicuous crest; body plumage soft, grayish-brown or fawn-color, shading by insensible degrees between the several parts; back darker, passing into bright cinnamon-rufous on forehead and crown, and thru dark ash of rump and upper tail-coverts into black of tail; tips of tail feathers abruptly yellow (gamboge); breast with a vinaceous cast, passing into cinnamon-rufous of cheeks; a narrow frontal line passing thru eye, and a short throat-patch velvety black; under tail-coverts deep cinnamon; wing blackish-ash, the tips of the primary coverts and the tips of the secondaries on outer webs, white, tips of primaries on outer webs bright yellow, whitening outwardly; the shafts of the rectrices produced into peculiar flattened red "sealing-wax" tips; bill and feet black. Length about 8.00 (203.2); wing 4.61 (117.1); tail 2.56 (65.1); bill .47 (11.9).

Recognition Marks.—Chewink size; grayish-brown coloration. As distinguished from the much more common Cedar-bird; belly *not* yellow; white wing-bars; under tail-coverts cinnamon.

Nesting.—Not known to breed in Washington. Like that of next species. Eggs, larger. Av. size, .98 x .69 (24.9 x 17.5).

General Range.—Northern portions of northern hemisphere. In North America, south in winter irregularly to Pennsylvania, Ohio, Illinois, Kansas, southern Colorado, and northern California. Breeds north of United States; also, possibly, in the mountains of the West.

Range in Washington.—Winter resident, regular and sometimes abundant east of the Cascades, especially in the northern tier of counties; rare or casual on the West-side.

Authorities.—*Impetis garrulus*, Brewster, B. N. O. C. VII, Oct. 1882, p. 227. Dr. J. E.

Specimens.—(U. of W.) Prov. Pt. C.

NOTHING can exceed the refined elegance of these "gentlemen in feathers" who visit us yearly in winter, rarely on Puget Sound, but abundantly in the northeastern portion of the State. Demure, gentle, courteous to a fault, and guileless to the danger point, and beyond, these lovely creatures exceed in beauty, if possible, their more familiar cousin, the Cedarbird. They move about in flocks, sometimes to the number of hundreds, and as the rigors of winter come on they search the orchard and berry-patch for ungarnished fruit, or divide with hungry Robins the largess of rowan trees. Much time is spent in amiable converse, but it is not at all fair to call them "chatterers," or *garrulus*, as tho they were monkeys. Dignity is of the very essence of their being, and, as fond as they are of good living, they would starve rather than do anything rude or unseemly.

An observer in Utah^a relates how an ill-mannered Robin, jealous of the good behavior of a company of these visitors, in an apple tree, set about to abuse them. "He would bluster and scream out his denunciations till he seemed unable longer to restrain himself, when, to all appearances, absolutely beside himself with rage because the objects of his wrath paid no attention to his railings, he did the catapult act—hurling himself straight at the intruders. Several of the Waxwings, in order to avoid an actual collision, left the places where they were feeding, and alighting on twigs near by paused for a moment, as if to observe the antics of the furious Robin, when they would resume their feeding. Their indifference to the loud bullying protests of the Robin, and their persistence in remaining on the premises after he had ordered them off so exasperated Mr. Redbreast that with screams of defiance he dashed from group to group without stopping to alight, until, exhausted quite as much by the heat of anger as by the unusual exertions he was making, he was glad to drop to a branch and pant for breath"—while the Waxwings continued to ignore the churl, as gentlemen should.

Concerning the nesting range of this bird there has been much surmise. For many years the single eggs taken by Kennicott at Fort Yukon on July 4, 1861, remained unique; but latterly we are learning that it also nests much further south. Mr. Brooks took four sets, one from a Murray pine and three from Douglas firs, at 158-Mile House, B. C., in June, 1901^b. Dr. C. S. Moody^c reports the taking of a set of five eggs at Sandpoint, Idaho, July 5, 1904. On June 26, 1904, Robert G. Bee, of Provo City, found a nest near Sunnyside, Utah^d. With such examples before us it is practically certain that the species will be found nesting in this State. Indeed, Mr. F. S. Merrill, of Spokane, believes that he once found a nest of the Bohemian Waxwing on the headwaters of the Little Spokane River near Milan. The nest he de-

a. Rev. S. H. Goodwin in "The Condor," Vol. VII., No. 4, p. 100.

b. The Auk, Vol. XX., July, 1903, p. 283.

c. "Pacific Sportsman," Vol. 2, June, 1905, p. 270.

d. The Condor, Vol. VII., July, August, 1905, p. 100.

scribes as having been placed in an alder at a height of eight feet, and it contained four eggs on the point of hatching. The brooding bird allowed a close approach while upon the nest, but was not seen again after being once flushed.

No. 134.

CEDAR WAXWING.

A. O. U. No. 619. *Bombycilla cedrorum* Vieill.

Synonyms.—CEDAR-BIRD. CHERRY-BIRD. CAROLINA WAXWING. LESSER WAXWING.

Description.—*Adults:* A conspicuous crest; extreme forehead, lores, and line thru eye velvety-black; chin blackish, fading rapidly into the rich grayish-brown of remaining fore-parts and head; a narrow whitish line bordering the black on the forehead and the blackish of the chin; back darker, shading thru rest of rump to blackish on tail; tail-feathers tinged with orange-yellow; belly sordid yellow; under tail-coverts white; wings slaty-gray, primaries narrowly edged with whitish, secondaries and inner quills without white markings, but bearing tips of red "sealing-wax"; the tail-feathers are occasionally found with the same curious, horny appendages; bill black; feet plumbeous. *Sexes* alike, but considerable individual variation in number and size of waxen tips. *Young,* streaked everywhere with whitish, and usually without red tips. Length 6.50-7.50 (105.1-190.5); wing 3.70 (.94); tail 2.31 (.58.7); bill .40 (10.2).

Recognition Marks.—Sparrow size; soft grayish-brown plumage; crest; red sealing-wax tips on secondaries; belly yellow; wings without white bars or spots, as distinguished from preceding species.

Nesting.—*Nest,* a bulky affair of leaves, grasses, bark-strips and trash, well lined with rootlets and soft materials; placed in crotch or horizontally saddled on limb of orchard or evergreen tree. *Eggs,* 3-6, dull grayish blue or putty-color, marked sparingly with deep-set, rounded spots of amber or black. Av. size, .86 x .61 (21.8 x 15.5). *Season:* June, July; two broods.

General Range.—North America at large, from the Fur Countries southward. In winter from the northern border of the United States south to the West Indies and Costa Rica. Breeds from Virginia, Kansas, Oregon, etc., northward.

Range in Washington.—Of regular occurrence in the State, but irregular or variable locally. Resident, but less common in winter.

Authorities.—*Ampelis cedrorum* Baird, **Cooper and Suckley**, Rep. Pac. R. R. Surv. XII, pt. II, 1860, p. 187. T. C. & S. Rh. D; Kb. Ra. D; S. Kk. B. E.

Specimens.—(U. of W.) Prov. P. B. E.

ONE does not care to commit himself in precise language upon the range of the Cedarbird, or to predict that it will be found at any given spot in a given season. The fact is, Cedarbirds are gypsies of the feathered kind. There are always some of them about somewhere, but their comings and goings are not according to any fixed law. A company of Cedarbirds may throng the

rowan trees in your front yard some bleak day in December; they may nest in your orchard the following July; and you may not see them on your premises again for years—unless you keep cherry trees. It must be confessed (since the shade of the cherry tree is ever sacred to Truth) that the Cedarbird, or "Cherrybird," has a single passion, a consuming desire for cherries. But don't kill him for that. You like cherries yourself. All the more reason, then, why you should be charitable toward a brother's weakness. Besides, he is so handsome,—handsomer himself than a luscious cherry even. Feast your eyes upon him, those marvelous melting browns, those shifting saffrons and Quaker drabs, those red sealing-wax tips on the wing-quills (he is canning cherries, you see, and comes provided). Feast your eyes, I say, and carry the vision to the table with you—and a few less cherries. Or, if there are not enough for you both, draw a decent breadth of mosquito-netting over the tree, and absolve your soul of murderous intent. Remember, too, if you require self-justification, that earlier in the season he diligently devoured noxious worms and insect pests, so that he has a clear right to a share in the fruit of his labors.

Cherries are by no means the only kind of fruit eaten by these birds. Like most orchard-haunting species, they are very fond of mulberries, while the red berries of the mountain ash are a staple ration in fall and winter. Truth to tell, these beauties are sad gluttons, and they will gorge themselves at times till the very effort of swallowing becomes a delicious pain.

The Cedarbird, being so singularly endowed with the gift of beauty, is denied the gift of song. He is, in fact, the most nearly voiceless of any of the American Oscines, his sole note being a high-pitched sibilant squeak. Indeed, so high-pitched is this extraordinary note that many people, and they trained bird-men, cannot hear them at all, even when the Waxwings are squeaking all about them. It is an almost uncanny spectacle, that of a company of Waxwings sitting aloft in some leafless tree early in spring, erect, immovable, like soldiers on parade, but complaining to each other in that faint, penetrating monotone. It is as tho you had come upon a company of the Immortals, high-removed, conversing of matters too recondite for human ken, and surveying you the while with Olympian disdain. You steal away from the foot of the tree with a chastened sense of having encountered something not quite understandable.

The dilatory habits of these birds are well shown in their nesting, which they put off until late June or July, for no apparent reason. In constructing the nest the birds use anything soft and pliable which happens to catch the eye. Some specimens are composed entirely of the green hanging mosses, while others are a complicated mixture of twigs, leaves, rootlets, fibers, grasses, rags, string, paper, and what not. The nest may be placed at any moderate height up to fifty feet, and a great variety of trees are used altho orchard trees are favorites. The birds are half gregarious, even in the nest-

ing season, so that a small orchard may contain a dozen nests, while another as good, a little way removed, has none. In the Nooksack Valley, near Glacier, Mr. Brown showed me a tiny pasture carved out of the woods, where he had found, during the previous season, six nests of the Cedarbird, placed at heights ranging from three to six feet above the ground in small clumps of vine maple or alder saplings. In Chelan we found them nesting in the tops of the solitary pine trees which line the stream.

The female sits closely upon her eggs, not infrequently remaining until forcibly removed. Once off, however, she makes away without complaint, and pays no further attention to the incident until the intruder has departed.

Always of a most gentle disposition, when the nesting season arrives, according to Mr. Bowles, these birds richly deserve the name of Love Birds. A leaf from his note-book supports the statement: "July 7, 1896. To-day I watched two Cedarbirds selecting a nesting site, first one location being tested, then another. Finally they decided upon a suitable place and commenced picking both dry and green leaves from the surrounding trees, placing them upon a horizontal limb where two or three twigs projected. Almost all of these leaves blew off as soon as placed, greatly to the surprise of the birds, who solemnly watched them drop to the ground. These fallen leaves were never replaced, fresh ones being gathered instead, and these were always secured from growing trees. Then one got a long strip of plant silk and, placing it on the leaf foundation flew a foot or two away and lit. The other bird promptly took away the silk and brought it to its mate, who very gently took it and put it back. This operation was repeated again and again. At times both held the silk, sitting only an inch or two apart, whereupon the bird who was the original finder would, *very gently*, pull it from the bill of its mate and replace it. At the end of fifteen minutes of this loving passage I was obliged to retire, and I shall never know whether the plant fiber was successfully placed or merely worn out."

No. 135.

NORTHERN SHRIKE.

A. O. U. No. 621. *Lanius borealis* Vieill.

Synonyms.—GREAT NORTHERN SHRIKE. BUTCHER-BIRD.

Description.—*Adult*: Upperparts clear, bluish gray, lightest—almost white—on upper tail-coverts; extreme forehead whitish; wings and tail black, the former with a conspicuous white spot at base of primaries, the latter with large, white terminal blotches on outer feathers, decreasing in size inwardly; a black band through eye, including auriculars; below grayish white, the feathers of the breast

and sides narrowly tipped with dusky, producing a uniform, fine vermiculation which is always present; bill blackish, lightening at base of lower mandible; feet black. *Young* birds are barred or washed with grayish brown. The plumage of adult is sometimes overcast above with a faint olivaceous tinge. Length 9.25-10.75 (235-273.1); wing 4.50 (114.3); tail 4.19 (106.4); bill .72 (18.3); tarsus 1.07 (27.3).

Recognition Marks.—Robin size; gray and black coloring; sharply hooked bill; breast vermiculated with dusky, as distinguished from next species.

Nesting.—Does not breed in Washington. *Nest*: a well constructed bowl of sticks, thorn-twigs, grasses, and trash, heavily lined with plant-down and feathers; in bushes or low trees. *Eggs*: 3-7, dull white or greenish gray, thickly dotted and spotted with olive-green, brown, or lavender. Av. size, 1.07 x .78 (27.2 x 19.8).

General Range.—Northern North America; south in winter to the middle and southern portions of the United States. Breeds north of the United States except sparingly in northern New England.

Range in Washington.—Spring and fall migrant and not common winter resident thruout the State, chiefly at lower levels.

Authorities.—? Townsend, Journ. Ac. Nat. Sci. Phila. VIII. 1839, 152 (Columbia River). **Baird**, Rep. Pac. R. R. Surv. IX. 1858, 325. C&S. D^t. Ra. D. B. E.

Specimens.—(U. of W.) P^t. Prov. B. E.

FLITTING like a gray ghost in the wake of the cheerful hosts of Juncos and Redpolls, comes this butcher of the North in search of his accustomed prey. If it is his first visit south he posts himself upon the tip of a tree and rasps out an inquiry of the man with the gun. Those that survive these indiscretions are thereafter faintly descried in the distance, either in the act of diving from some anxious summit, or else winging swiftly over the inequalities of the ground.

All times are killing time for this bloodthirsty fellow, and even in winter he "jerks" the meat not necessary for present consumption—be it chilly-footed mouse or palpitating Sparrow—upon some convenient thorn or splinter. In spring the north-bound bird is somewhat more amiable, being better fed, and he pauses from time to time during the advance to sing a strange medley, which at a little remove sounds like a big electric buzz. This is meant for a love song, and is doubtless so accepted by the proper critics, but its rendition sometimes produces about the same effect upon a troop of Finches, which a cougar's serenade does upon a cowering deer.

Experts try to make out that this creature is beneficial, on the whole, because of the insects he devours, but I have seen too much good red blood on this butcher's beak myself. My gun is loaded!

Suckley writing in the Fifties remarks the scarcity of all Shrikes in Oregon or Washington "Territories," and this is fortunately still true, especially west of the Cascades. The probable explanation is that the mild climate of the Pacific slope of Alaska retards or prevents the southward movement of the more hardy species.

No. 136.

WHITE-RUMPED SHRIKE.

A. O. U. No. 622 a. *Lanius ludovicianus excubitorides* (Swains.).

Description.—*Adult*: Dark bluish gray above, changing abruptly to white on upper tail-coverts; scapulars chiefly white; wings black, a small white spot at base of primaries; the inner quills narrowly tipped with white; tail black, the outer pair of feathers chiefly white, and the succeeding broadly tipped with white in descending ratio until color disappears in two central pairs; below white slightly soiled on breast, but everywhere strongly contrasting with upperparts; narrow frontal line including nasal tufts, lores, and ear-coverts, black,—continuous, and passing mostly below eye; bill and feet black. *Immature*: Colors of adult less strongly contrasted; lower parts washed with brownish; loreal bar obscure; more or less vermiculated with dusky all over (in younger birds), or upon the underparts alone; ends of wing-quills, coverts, and tail-feathers often with ochraceous or rusty markings. Length of adult male: 8.50-10.00 (215.0-254); wing 3.90 (100.6); tail 3.0 (99); bill .60 (15.3); tarsus 1.1 (28).

Recognition Marks.—Chewink to Robin size; dark gray above; whitish below; longitudinal black patch of head; wings black and white; breast of adult unmarked, as distinguished from both *L. borealis* and *L. l. gambeli*.

Nesting.—*Nest*: a bulky but well-built structure of sticks, thorn-twigs, sage-bark, dried leaves, etc., heavily lined with wool, hair, and feathers; placed at moderate heights in sage-brush or sapling. *Eggs*: 5-7, dull grayish or greenish white, thickly speckled and spotted with pale olive or reddish brown. Av. size, .97 x .73 (24.6 x 18.5). *Season*: April, June; two broods.

General Range.—Western North America from the Great Plains westward, except Pacific Coast district and from Manitoba and the plains of Saskatchewan south over the tablelands of Mexico; south in winter over the whole of Mexico intergrading with *L. l. migrans* in region of the Great Lakes.

Range in Washington.—Common summer resident east of the Cascades, chiefly in sage-brush country.

Authorities.—Dawson, Auk, XIV, 1897, 179. (T), D, D, S, S.

Specimens.—(U. of W.) P. C.

THE brushy draws of the low lava ranges and the open sage stretches of the East-side constitute the favorite preserve of this lesser bird of prey. He arrives from the South early in March when his patchy plumage harmonizes more or less with the snow-checkered landscape, but he is nowise concerned with problems of protective coloration. Seeking out some prominent perch, usually at this time of year a dead greasewood or a fence-post, he divides his time between spying upon the early-creeping field mouse and entertaining his lady love with outlandish music. Those who have not heard the White-rumped Shrike *sing*, have missed a treat. He begins with a series of rasping sounds, which are probably intended to produce the same receptive condition in his

audience which Ole Bull secured by awkwardly breaking one string after another on his violin, till only one was left. There, however, the resemblance ceases, for where the virtuoso could extract a melody of marvelous variety and sweetness from his single string, the bird produces the sole note of a struck anvil. This pours forth in successive three-syllabled phrases like the metallic and reiterative clink of a freely falling hammer. The chief difference which



Taken in Douglas County.

Photo by the Author.

THE SHRIKE'S PRESERVE.

appears between this love song and the ordinary call of warning or excitement is that in the latter case the less tender passions have weighted the clanging anvil with scrap iron and destroyed its resonance.

The Shrike is a bird of prey but he is no restless prowler or hoverer, wearing out his wings with incessant flight—not he. Choosing rather a commanding position on a telegraph wire, or exposed bush top, he searches the ground with his eye until he detects some suspicious movement of insect, mouse, or bird. Then he dives down amongst the sage, and if successful returns to his post to devour at leisure. The bird does not remain long enough at one station to inspire a permanent dread in the local population of comestibles; but rather moves on from post to post at short intervals and in methodical fashion. In flight the

bird moves either by successive plunges and noisy reascensions, or else pitches downward from his perch and wings rapidly over the surface of the vegetation.

The Sage Shrikes are prolific and attentive breeders. The first brood is brought off about the 1st of May, but fresh eggs may sometimes be found as early as the last week in March in the southern part of the State. A second brood may be expected from June 1st to 15th.



Taken in Douglas County.

Photo by the Author.

NEST AND EGGS OF WHITE-RUMPED SHRIKE.

The nest is a bulky but usually well-built affair, placed habitually in a sage bush, or a greasewood clump, with wild clematis for third choice. The structure is designed for warmth and comfort, so that, whenever possible, to the thickened walls of plant fibers, cowhair, or sheep's wool, is added an inner lining of feathers, and these not infrequently curl over the edge so as completely to conceal the nest contents. One nest examined in Walla Walla County contained the following materials: Willow twigs, broom-sage twigs, sage bark, weed stems, dried yarrow leaves, dried sage leaves, hemp, wool, rabbit fur, horse-hair, cow-hair, chicken feathers, string, rags, and sand, besides a thick mat

of finely comminuted scales, soft and shiny, the accumulated horny waste from the growing wing-quills of the crowded young—together a sad mess.

The parent birds are singularly indifferent as a rule to the welfare of a nest containing eggs alone. The female sits close, but once flushed, stands clinking in the distance, or else absents herself entirely. When the young are hatched, however, the old birds are capable of a spirited and deafening defense.

It is curious that in Washington we have seen no signs of the out-door larder, consisting of grasshoppers, mice, garter-snakes, etc., impaled on thorns, which the eastern birds of this species are usually careful to maintain somewhere in the vicinity of the nest. It may be simply that the lack of convenient thorns accounts for this absence, or for the failure of the habit.

Altho this bird belongs to a bad breed, one containing, among others, the notorious "*Necuntöter*," or Ninekiller, of northern Europe, concerning which tradition maintains that it is never satisfied until it has made a kill of nine birds hand-running, the evidence seems to be overwhelmingly in its favor. Birds are found to constitute only eight per cent of this bird's food thruout the year, while, on account of its services in ridding the land of undoubted vermin, its presence is to be considered highly beneficial.

No. 137.

CALIFORNIA SHRIKE.

A. O. U. No. 622 b. *Lanius ludovicianus gambeli* Ridgway.

Description.—Similar to *L. l. excubitorides* but decidedly darker, duller gray above; underparts more sordid, tinged with brownish or with more or less distinct transverse vermiculation of pale brownish gray on chest and sides of breast; averaging slightly smaller.

Recognition Marks.—As in preceding—duller.

Nesting.—As in *L. l. excubitorides*—has not yet been reported from Washington.

General Range.—Pacific Coast district from southwestern British Columbia to northern Lower California; south in winter to Cape St. Lucas and western Mexico.

Range in Washington.—Rare summer resident west of the Cascades.

Authorities.—? Orn. Com., Journ. Ac. Nat. Sci. Phila. VII. 1837, 193 (Columbia River). *Lanius ludovicianus excubitorides* Lawrence, Auk, IX. 1892, 46.

RESIDENT Shrikes, presumably referable to this recently elaborated subspecies, are exceedingly rare in western Washington. Mr. Bowles has not seen any near Tacoma, and neither Mr. Rathbun nor myself have encountered them in Seattle. Mr. R. H. Lawrence, however, notes having seen three "White-rumped Shrikes" on June 10, 1890, in a small clearing on the Hump-tulips River^a.

The smaller Shrikes are birds of the open country, and they should be found in at least Lewis, Thurston, and Pierce Counties.

a. Birds of Gray's Harbor, Wash., Auk, Vol. IX., Jan., 1892, p. 46.

No. 138.

RED-EYED VIREO.

A. O. U. No. 624. *Vireosylva olivacea* (Linn.).

Description.—*Adult*: Crown grayish slate, bordered on either side by blackish; a white line above the eye, and a dusky line thru the eye; remaining upperparts light grayish olive-green; wings and tail dusky with narrow olive-green edgings; below dull white, with a slight greenish-yellow tinge on lining of wings, sides, flanks, and crissum; first and fourth, and second and third primaries about equal, the latter pair forming the tip of wing; bill blackish at base above, thence dusky or horn-color; pale below; feet leaden blue; iris red. Little difference with age, sex, or season, save that young and fall birds are brighter colored. Length 5.50-6.50 (139.7-165.1); wing 3.15 (.86); tail 2.10 (53.5); bill .49 (12.5); tarsus .70 (18).

Recognition Marks.—Warbler size; largest; white superciliary line contrasting with blackish and slate of crown; red eye. Note smoother, and utterance a little more rapid than in *V. s. cassinii*.

Nesting.—*Nest*, a semi-pensile basket or pouch, of bark-strips, "hemp," and vegetable fibers, lined with plant-down, and fastened by the edges to forking twigs near end of horizontal branch, five to twenty feet up. *Eggs*, 3 or 4, white, with black or umber specks and spots, few in number, and chiefly near larger end. Av. size, .85 x .56 (21.6 x 14.2). *Season*: c. June 1; one brood.

General Range.—Eastern North America, west to Colorado, Utah, Washington and British Columbia; north to the Arctic regions; south in winter from Florida to the equator. Breeds nearly thruout its North American range.

Range in Washington.—Imperfectly made out. Summer resident on both sides of the Cascades. Either increasingly abundant or more observed latterly (Brook Lake, Chelan, Stehekin, Seattle, Tacoma, Kirkland breeding 1908).

Migrations.—*Spring*: Seattle, May 3, 1908.

Authorities.—**Belding**, Land Birds of the Pacific District, 1890, p. 19. (Walla Walla by J. W. Williams, 1885). *Sst.*, B.

Specimens.—C.

WE are rubbing our eyes a little bit and wondering whether the Red-eyed Vireo has really been here all the time, or whether he only slipped in while we were napping a decade or two since. Certain it is that the bird's presence in the Pacific Northwest was unknown to the pioneers, Townsend, Cooper, Suckley, and the rest; and the first intimation we had of the occurrence of this Vireo west of the Rockies was Chapman's record, published in 1890 of specimens taken at Ducks and Ashcroft, B. C. The year following, viz., August 4, 1891, a singing Red-eye was recognized by Mr. C. F. Batchelder.

of Cambridge, Mass., at the Little Dalles, in this State^a. Mr. Lyman Belding, the veteran ornithologist, of Stockton, Cal., advises me, however, that this Vireo was first seen by his friend, Dr. J. W. Williams, of Walla Walla, on June 4 and 24, 1885, and that six specimens were taken. Dr. Merrill, writing in 1897^b, records them as abundant summer visitors at Fort Sherman, Idaho; and Fannin notes their occurrence upon Vancouver Island. Messrs. C. W. and J. H. Bowles met with this species in the Puyallup Valley on June 23, 1899, when they saw and heard at least half a dozen. Mr. Bowles and I were constantly on the lookout for this bird during our East-side trip in May and June, 1906, but we failed to observe it in either Spokane or Stevens Counties. We found it first in a wooded spur of the Grand Coulee on June 13th; then commonly at Chelan, where it nested; and also at the head of Lake Chelan with Cassin Vireos right alongside. And now comes the announcement of its breeding at Kirkland where Miss Jennie V. Getty took two sets in the season of 1908.

The truth is, the Cassin Vireo has so long occupied the center of the stage here in the Northwest, that we may never know whether his cousin, Red-eye, stole a march on us from over the Rockies, or was here for a century grieving at our dullness of perception. In habit the two species are not unlike, and their ordinary notes do not advertise differences, even to the mildly observant. Those of the Red-eye are, however, higher in pitch, less mellow and soft in quality, and are rendered with more sprightliness of manner. Its soliloquizing notes are often uttered—always in single phrases of from two to four syllables each—while the bird is busily hunting, and serve to mark an overflow of good spirits rather than a studied attempt at song. His best efforts are given to the entertaining of his gentle spouse when she is brooding upon the nest. A bird to which I once listened at midday, in Ohio, had chosen for his station the topmost bare twig of a beech tree a hundred feet from the ground, and from this elevated position he poured out his soul at the rate of some fifty phrases per minute, and without intermission during the half hour he was under observation.

So thoroly possessed does our little hero become with the spirit of poesy, that when he takes a turn upon the nest he indulges, all unmindful of the danger, in frequent outbursts of song. Both birds are closely attached to the home, about which center their fears and their hopes; and well they may be, for it is a beautiful structure in itself. The nest is a semipensile cup, bound firmly by its edges to a small fork near the end of some horizontal branch of tree or bush, and usually at a height not exceeding five or ten feet. It is composed largely of fibers from weed-stalks, and fine strips of cedar or clematis bark, which also forms what little lining there is. A curious characteristic of the entire Vireo

a. The Auk, Vol. IX., Oct., 1892, p. 396.

b. The Auk, Vol. XV., Jan., 1898, p. 18.

family is the attention paid to the outside instead of the inside of the nest. The outside is carefully adorned with lichens, old rags, pieces of wasp nests, or bits of newspaper, with no idea of furthering concealment, for the result is often very conspicuous. The walls are not over a third of an inch thick, but are so strong that they not infrequently weather the storms of three or four seasons.

When we came upon a female sitting contentedly in her nest in the center of a charming birch tangle in Chelan County, we had as good as photographed the eggs. We were particularly elated at our good fortune because the eggs had not yet been taken within the limits of the State. When we had watched the mild-eyed mother for ten minutes, and had lessened the distance to five feet, we began to suspect young; but when she flitted, we found nothing at all. She was only fooling.

No. 139.

WESTERN WARBLING VIREO.

A. O. U. No. 627 a. *Vireosylva gilva swainsonii* (Baird).

Description.—*Adult*: Above, dull ashy, almost fuscous, tinged with olivaceous, same on pileum,—the last-named color brightest on intercapulars, rump, and edgings of secondaries and retrices; wings and tail fuscous, the primaries with faint whitish edgings; no wing-bars; first primary spurious,—only about a third as long as the others; point of wing formed by third, fourth, and fifth primaries; second shorter than sixth; below white with slight tinges on sides,—buffy on sides of head and neck, olive-fuscous on sides of breast, sulphur-yellow on sides of belly and flanks, and sometimes vaguely on breast; lores and space about eye whitish, enclosing obscure dusky line thru eye; bill dusky above, lighter below; feet blackish. Length 5.00-6.00 (1.27-1.524); wing 2.64 (.67); tail 1.94 (.493); bill .39 (.10); tarsus .60 (.175).

Recognition Marks.—Warbler size; general absence of positive characteristics,—altogether the plainest-colored bird of the American avifauna.

Nesting.—*Nest*: a pensile pouch of bark-strips, grasses, vegetable fibers, and trash, carefully lined with plant-down; hung usually from fork of small limb, at any height. *Eggs*: 3 or 4, white, sparingly and distinctly dotted or spotted, or, rarely, blotched with black, amber, or reddish brown, chiefly at the larger end. *Av. size* .75 x .55 (10 x 13.0). *Season*: June 1-20; one brood.

General Range.—Western United States and Canada (British Columbia, Alberta and Athabasca), breeding south to southern border of United States and southern extremity of Lower California; south in winter thru Mexico to Vera Cruz and Oaxaca.

Range in Washington.—Summer resident thruout the State in deciduous-timber, chiefly at lower levels.

Migrations.—*Spring*: Yakima, May 6, 1900; Seattle, May 5, 1905; Yakima, May 4, 1906; Tacoma, May 5, 1907; Seattle, May 3, 1908.

Authorities.—? *Vireo gilvus*, Townsend, Journ. Ac. Nat. Sci. Phila., VIII. 1839, p. 153 (Columbia River). *Vireo gilvus (swainsonii* proposed), Baird, Rep. Pac. R. R. Surv., IX. pt. II. 1858, 336. T. C&S. L. Rh. D¹. Ra. D². J. B. E.

Specimens.—U. of W. Prov. B. B.N. E.

THE old-fashioned name "Greenlet," as applied to the Vireos, was a misnomer, if a description of plumage was intended; but if it was intended to memorialize the bird's fondness for greenery, nothing could have been more apt. The Warbling Vireo's surroundings must be not only green, but freshly green, for it frequents only deciduous trees in groves and riverside copses. It is not an abundant bird, therefore, in Washington, altho equally distributed, whether in the willows and birches which gather about some lonesome spring in the bunch-grass country, or among the crowded alders and maples of the turbid Nooksachk. Moreover, the bird is not so frequently found about parks and shade trees as in the East, altho it looks with strong favor upon the advent of orchards. And the orchardist may welcome him with open arms, for there is not among all his tenants a more indefatigable gleaner of bugs and worms.

Because he is clad in Quaker gray there is little need for the Vireo to show himself as he sings, and he remains for the most part concealed in the dense foliage, a vocal embodiment of the living green. Unlike the disconnected fragments which the Red-eye furnishes, the song of this bird is gushing and continuous, a rapid excursion over pleasant hills and valleys. Continuous, that is, unless the bright-eyed singer happens to spy a worm in *medias res*, in which event the song is instantly suspended, to be resumed a moment later when the wriggling tid-bit has been dispatched. The notes are flute-like, tender, and melodious, having, as Chapman says, "a singular alto undertone." All hours of the day are recognized as appropriate to melody, and the song period lasts from the time of the bird's arrival, early in May, until its departure in September, with only a brief hiatus in July.

In sharp contrast with the beautiful canzonettes which the bird showers down from the treetops, come the harsh, wren-like



WESTERN WARBLING VIREO AT NEST

scolding notes, which it often delivers when searching thru the bushes, and especially if it comes across a lurking cat.

The Warbling Vireo's cradle is swung midway from the fork of some nearly horizontal branch in the depths of a shady tree. In height it may vary from fifteen to twenty-five feet above the ground; but I once found one in a peach tree without a shadow of protection, and within reach from the ground. The structure is a dainty basket of interwoven grasses, mosses, flower-stems, and the like. It is not, however, so durable as that of some other Vireos, since much of its thickness is due to an ornamental thatching of grass, bark-strips, green *usnea* moss, and cottonwood down, which dissolves before winter is over. The female is a close sitter, sticking to her post even tho nearly paralyzed with fear. The male is usually in close attendance, and knows no way of discouraging the inquisitive bird-man save by singing with redoubled energy. He takes his turn at the eggs when his wife needs a bit of an airing, and even, it is said, carries his song with him to the nest.

No. 140.

CASSIN'S VIREO.

A. O. U. No. 620a. *Lanivireo solitarius cassinii* (Xantus).

Synonym.—WESTERN SOLITARY VIREO.

Description.—*Adult male*: Crown and sides of head and neck deep olive-gray; a supraloral stripe and eye-ring whitish, the latter interrupted by dusky of lore; remaining upperparts olive-green overcast with gray, clearing, pure olive-green on rump and upper tail-coverts; wings and tail blackish with edging of light olive-green or yellowish (white on outer web of outer rectrices); tips of middle and greater coverts yellowish olive, forming two rather conspicuous bars; underparts white tinged with buffy, changing on sides and flanks to sulphur yellow or pale olive; under tail-coverts yellowish; bill grayish black above, paler below; feet dusky, iris brown. *Adult female*: Like male but duller, browner on head and neck, less purely white below. *Immature*: Head and neck more nearly like back; supraloral streak, orbital ring, and underparts washed with brownish buff. Length about 5.50 (130.7); wing 2.84 (72.2); tail 2.05 (52.2); bill .30 (10); tarsus .75 (19).

Recognition Marks.—Warbler size; slaty gray head contrasting with olivaceous back; whitish eye-ring distinctive; voice has more of an edge than that of *V. olivacea*.

Nesting.—*Nest*: a semi-pensile basket of woven bark-strips, grasses, and vegetable fibers, variously ornamented externally with cherry petals, spider cases, bits of paper, etc., lashed to bark of horizontal or descending bough of sapling

(oak, vine-maple, fir, etc.) at a height of from five to thirty feet; bulkier and of looser construction than that of other Vireos; measures $2\frac{1}{4}$ inches across by $1\frac{1}{2}$ inches deep inside; walls often $\frac{3}{4}$ of an inch in thickness. *Eggs*: 3-5, usually 4, white or creamy white, sparingly marked with spots, which vary from rich red brown to almost black—but unmarked specimens are of record. *Av. size* .75 x .55 (19 x 13.9). *Season*: May 15-June 5; one brood.

General Range.—Pacific Coast district north to British Columbia, east to Idaho (Ft. Sherman; Ft. Lapwai), breeding from Los Angeles County, California, northward thruout its range; south in winter to western Mexico.

Range in Washington.—Common summer resident on both sides of the Cascades, found chiefly in timbered areas.

Migrations.—*Spring*: Seattle-Tacoma, c. April 15.

Authorities.—? *Vireo solitarius*, Ornithological Committee, Journ. Ac. Nat. Sci. Phila., VII. 1837, 193 (Columbia River). *V. solitarius* Vieillot, **Baird**, Rep. Pac. R. R. Surv., IX. pt. II 1858, p. 340, part. ('T). C&S. Rh. D¹. Ra. D². Ss². J. B. E.

Specimens.—(U. of W.) B. Prov. P¹.

NOTHING so endears a bird to a human admirer as a frank exhibition of confidence. Overtures of friendship on the bird's part may traverse all rules of caution and previous procedure, but henceforth there is a new relation established between them, bird and man, and the man,

at least, is bound to live up to it. At the oncoming of a smart shower on Capitol Hill (before the "For Sale" days) the bird-man put into a fir-covered nook for shelter, and had not been there two minutes before a pair of Cassin Vireos entered for the same reason. They were not in the least disturbed by the man's presence, but cheerfully accepted him as part of Things as They Are. Therefore, they proceeded to preen their dampened feathers at distances of four or five feet, while the bird-man sat with bated breath and glowing eyes. The birds roamed freely about the nook and once, I think, he made a grimace behind the bird-man's back; for when they came around in front again, I judged she was saying, "Ar'n't you the wag!" while he tittered in droll recollection.



Taken in Oregon.

Photo by Finley and Bohlman.

CASSIN VIREO AT NEST.

box, a rattling, rubbing, shaking note, of three or more vibrations, ending in a little vocal flourish.

These Vireos swing a bulky basket from the lower or middle heights of oak trees, fir trees, alders, or saplings of various sorts. Usually no dependence is placed in cover, save that the ornamented nest corresponds roughly with its general surroundings of leaf, moss and lichen. In sheltered places, the texture of the nest is so well preserved that it may require close inspection the second season to distinguish it from a new nest. One such I examined, green with growing moss, and stark at the

lowermost branch-tip of an unleafed cornel sapling, and I could not have determined its age save for a tiny weed-shoot germinating from the bottom of the cup.

Further Mr. Bowles says of their nesting habits: "Both birds assist in the duties of incubation, the male singing most assiduously while on the nest, and usually singing close to his mate while she is sitting. His turn at sitting seems to come between nine o'clock in the morning and noon, and the nest is not



Taken near Tacoma. Photo by Bowles and Dawson.

A DECORATED NEST.

hard to find if his song can be traced. The bird student must work quietly, however, as the song at once ceases should any unusual noise occur. They are most courageous while on the nest, seldom leaving until removed by hand, when both birds remain within a few feet of the intruder, scolding vigorously. So much noise do they make that all the birds in the vicinity are attracted—indeed this is about the only sure method of ascertaining the presence of some of our rarer Warblers. On one such occasion a female Cooper Hawk left her nest, which was seventy-five yards distant, and sat on a branch overhead, screaming at me.

"They are the quickest as well as the slowest birds in completing their nests that have come under my notice. One pair built a



OVER YOUNG TO FLIT.

handsome nest and laid four eggs in precisely ten days; while another pair were more than three weeks from the time the nest was started until the eggs were laid.

"They are the only Vireos that I have ever known to nest in communities. Single pairs are the rule. I have found as many as six occupied nests inside of a very small area, the nests being only a few yards apart.

No. 141.

ANTHONY'S VIREO.

A. O. U. No. 632 c. *Vireo huttoni obscurus* Anthony

Synonym.—Dusky Vireo

Description.—*Adults*: Above dull olive, brightening (more greenish) posteriorly; wings and tail dusky, edged chiefly with pale olive-green; two prominent g-bars of pale olive-yellow or whitish, formed by tips of middle and greater coverts; tertials broadly edged with palest olive on outer, and with whitish webs; outer web of outermost rectrix whitish; underparts sordid whitish and more or less washed, chiefly on breast and sides, with dingy olive-yellow; pale; an orbital ring of whitish, or palest olive-yellow, interrupted midway over lid by spot of dusky; bill horn-color above, pale below. Length about 4.75 (120.6); average of three specimens in Provincial Museum at Victoria: wing 1.6 (50.0); tail 2.20 (55.8); bill .35 (8.9); tarsus .75 (19.1).

Recognition Marks.—Pygmy to warbler size; dingy coloration; whitish wing-bars serve to distinguish bird from *Vireosylva g. swainsonii*, but throw it into confusion in summer with the Western Flycatcher (*Empidonax difficilis*), which it otherwise closely resembles, and in winter with the Sitkan Kinglet (*Regulus c. grinnelli*). From the Flycatcher it may be distinguished by its shorter, narrower and yet thicker bill, and by its more restrained yellowness; from the Kinglet by its greater size and much stouter bill, more prominent wing-bars, and rather less prominent eye-ring; and from both by its demure ways.

Nesting.—*Nest*: a semipensile basket of interwoven mosses lined with grasses (nine feet high in fir tree—one example known). *Eggs*: 2-5(?) ; .72 x .52 (18 x 12.9). *Season*: June (probably also earlier).

General Range.—Pacific Coast district from western Oregon to southwestern British Columbia at lower levels (not at all confined to oak woods as variously reported).

Range in Washington.—West-side, as above; strictly resident.

Authorities.—? Townsend, Journ. Ac. Nat. Sci. Phila. VIII. 1839, 153 (Columbia River). **Bowles (C. W. and J. H.)**, Auk, XV. 1898, 138. Ra. B. E.

Specimens.—U. of W. Prov. B. E.

IN approaching the study of Anthony's Vireo one must forget all he knows or thinks he knows about Vireos in general. This bird is *sui generis*, and deviations from all known rules are its delight. It has been, in fact, until quite recently, a sort of woodland sphinx, an ornithological mystery, the subject of much inquiry and hazard. Its presence in Washington was quite overlooked by Cooper and Suckley, and Mr. Rathbun's appears to be the record^a of first occurrence, that of a bird taken May 14, 1895. I took a specimen on Capitol Hill on the third day of June of the same year; and since that time appearances have become a matter of course to the initiated. Samuel N. Rhoads^b, writing in 1893, considered Anthony's Vireo a rare visitor to Vancouver Island, where he secured a specimen in 1892 near Victoria. Fannin^c records it as "a summer resident on Vancouver Island." As matter of fact, the bird is *resident* the year round wherever it occurs. I saw it near Victoria during the coldest weather of 1905-6, and find it regularly at Seattle and Tacoma during the winter season. J. H. Bowles secured a specimen, a male in full song, at American Lake on January the 26th, 1907. Moreover, this bird had a bare belly as tho it might have been assisting with incubation.

The very fact that these birds winter with us argues that they have been here for always and always, and the darkening of plumage (as compared with the type form, *V. huttoni*) testifies further to their long residence.

Anthony's Vireo is leisurely, almost sluggish at times, in its movements.

a. Auk, Vol. XIX., Apr., 1902, p. 138.

b. Proc. Acad. Nat. Sci. Phila., 1893, p. 54.

c. Cat. B. C. Birds Prov. Mus., Victoria, 1904, p. 52.

During the winter it mingles freely with the local troops of Kinglets and Chickadees, and keeps largely to the depths of fir trees. When moving about silently, it bears a striking resemblance to the Ruby-crowned Kinglet. It is, of course, slightly larger and much more deliberate, lacking especially the wing-flirt of the Kaiserkin. The region about the eye is more broadly whitish, and the wing-bars concede a difference upon inspection, but the resemblance is so close as altogether to deceive the unwary.

In spring the bird separates itself from its late companions, and begins to explore the budding alders and maples. As the season advances the bird plants itself in some thicket and complains by the hour in strange, monotonous, unvirgonine notes. The songs vary endlessly in different individuals, but have this in common, that they are a deliberate, unvarying succession of double notes, usually, but not always, of a slightly nasal character. *Chu-zēem* - - - *chu-zēem* - - - - *chu-zēem* - - *ad lib.*, is the common type; *Pu-chečāñ* - - - - *pu-chečāñ* - - - - - *puchečāñ*, is a French variation; *Poo-cēp'* - - - *poo-cēp'* and *jūreč'* - *jūreč'* - *jūreč'* are types lacking the nasal quality. Only once I heard the notes pronounced quite rapidly, *pe-eg', pe-eg', pe-eg', pe-eg', pe-eg', ad infinitum*, or rather *ad adzentum shotguni*. Occasionally the first syllable is accented; as, *(pe)cheč-oo* or *cheč-oo, cheč-oo*.

Before he has found a mate Anthony roams about with some degree of restlessness, shifting his burden of song from place to place with a view to effect, and uttering now and then coaxing little requests which are certainly meant to win the heart of the lady in hiding. This squeaking note is sometimes raised to the dignity of song, at which times it is not unlike the whining of a dog, a most extraordinary sound to come from so tiny a throat. And if one mentions a chirp, or chuck, like that of a Red-wing Blackbird on a small scale, we have most of the representative efforts of this eccentric genius.

Only one nest of this subspecies has been reported to date, that discovered by Mr. C. W. Bowles, on June 21, 1897, near South Tacoma. It was placed nine feet up in a young fir, where it hung suspended by two small twigs. Externally it was composed entirely of a long hanging moss, some variety of *Usnea*, very thickly and closely interwoven, being thus conspicuously devoid of such exterior decorations as other Vireos provide. Inside was a carefully prepared bed of fine dry grasses, upon which lay two eggs half incubated.

"The female bird was on the nest when first seen and, unlike the majority of our Vireos, flushed the instant the ascent of the tree was attempted. From the nest she flew about twenty feet into a neighboring fir, where she looked down upon our operations with apparently no concern whatever. Beyond rearranging her feathers from time to time, there was nothing to indicate that she had a nest anywhere in the vicinity, as she made no sound or complaint of any kind. Neither was there any of the nervous hopping from

twig to twig in the manner by which so many of the smaller birds as clearly display their anxiety as they do by their notes of distress."^a

No. 142.

KINGBIRD.

A. O. U. No. 444. *Tyrannus tyrannus* (Linn.).

Synonyms.—EASTERN KINGBIRD. BEE MARTIN. TYRANT FLYCATCHER.

Description.—*Adult*: Above ashy black changing to pure black on head, and fuscous on wings; crown with a concealed orange-red (cadmium orange) patch or "crest," the orange feathers black-tipped and overlying others broadly white at base; wings with whitish and brownish ash edgings; tail black, all the feathers broadly white-tipped, and the outermost pair often white-edged; below white, washed with grayish on breast; bill and feet black. *Immature* birds lack the crown-patch, and are more or less tinged with fulvous or buffy on the parts which are light-colored in the adult. Length 8.00-9.00 (203-228.6); wing 4.60 (116.8); tail 3.31 (84.1); bill from nostril .52 (13.2).

Recognition Marks.—Chewink size; blackish ash above; white below; black tail conspicuously tipped with white; noisy and quarrelsome.

Nesting.—*Nest*: at moderate heights in trees, usually over water, of weed-stalks, plant-fibres and trash, with a felted mat of plant-down or wool, and an inner lining of fine grasses, feathers, rootlets, etc. *Eggs*: 3 or 4, sometimes 5, white or cream-white, distinctly but sparingly spotted with dark umber and occasional chestnut. Av. size .98 x .73 (24.9 x 18.5). *Season*: first week in June; one brood.

General Range.—North America from the British Provinces south; in winter thru eastern Mexico, Central and South America. Less common west of the Rocky Mountains. Not recorded from northern Mexico and Arizona.

Range in Washington.—Not uncommon summer resident on East-side; not common, but of regular occurrence in certain localities west of the Cascades; nearly confined to vicinity of water in lake or pond.

Authorities.—*Tyrannus carolinensis* Baird, *Baird*, Rep. Pac. R. R. Surv., IX, pt. II, 1858, p. 171. T. C. S., D. R., D. S., S., J. B. E.

Specimens.—(U. of W.) Prov. P., C. E.

NO one has come forward with a theory to account for the testiness of this bird's temper, nor for the domineering qualities which distinguish him above all others; but I hazard that it is because his glowing crown is partially concealed by bourgeois black. Those whose regal marks are more patent are wont to receive homage as matter of course, but the scion of an unacknowl-

a. C. W. and J. H. Bowles in *The Auk*, Vol. XV., Apr., 1898, p. 139.

edged house, a feathered Don Carlos, must needs spend a fretful life in defense of his claims. Toward those who knuckle down tamely the little tyrant is often very gracious, and it may be conceded that he does perform a real service in holding the common enemies at bay. Who has not seen him as he quits his perch on some commanding tree and hurries forward, choking with vengeful utterance, to meet and chastise some murderous hawk, who before any other foe is brave? Down comes the avenger! The Hawk shies with a guttural cry of rage and terror, while a little puff of feathers scatters on the air to tell of the tyrant's success. Again and again the quick punishment falls, until the tiny scourge desists, and returns, shaking with shrill laughter,

to give his mate
an account of
his adventure.

It is easily possible, however, to exaggerate the pugnacity of the Kingbird, or to infer from extreme examples that all are quarrelsome. It is not unusual for Kingbirds to be on the best of terms with their immediate neighbors, thieves always excepted.

I once found in



by F. S. Merrill. Taken near Spokane.
A DEMURE YOUNG TYRANT.

one small aspen tree at Chelan the nests of three birds each containing eggs, viz., a Robin, an Oriole, and a Kingbird. The two latter were within five feet of each other. Dr. Brewer also records an exactly similar case. Kingbird's courage, which is unquestionable, is often tempered by prudence; altho at other times it quite overbalances his better judgment. The Burrowing Owl will tolerate none of his nonsense, and I have seen the birds make sad mistakes in molesting these virtuous mousers. The sight of a Shrike will make a Kingbird shrink into the smallest possible compass, while Catbirds, too, are said to be, for valid reasons, quite exempt from molestation.

The food of the Kingbird consists entirely of insects, caught on the wing for the most part, by sallies from some favorite perch. His eyesight must be very good, as he not infrequently spies his prey at distances of from twenty to fifty yards. Honey bees form an occasional but inconsiderable article of diet. Grasshoppers are not overlooked, and they sometimes capture, not without a scuffle, those big brown locusts (*Melanoplus sp.*) which make flippant exposure of their persons on a summer day. Both in the taking of food and in the discharge of police duties the Kingbird exhibits great strength and swiftness, as well as grace in flight. Once, when passing in a canoe thru a quiet, weed-bound channel, I was quite deceived for a time by the sight of distant white-breasted birds dashing down to take insects near the surface of the water, and even, occasionally dipping under it. They had all the ease and grace of Tree Swallows, but proved to be Kingbirds practising in a new role.

This fondness for water is often exhibited in the birds' choice of a nesting site. Where accustomed to civilization, orchard or shade trees are preferred, but on many occasions nests are found on low-swinging horizontal branches overhanging the water; and, as often, in tiny willow clumps or isolated trees entirely surrounded by it. The nest of the Kingbird sometimes presents that studied disarray which is considered the height of art. Now and then a nest has such a disheveled appearance as to quite discourage investigation, unless the owners' presence betrays the secret of occupancy. On the shore of Cold Spring Lake, in Douglas County, we noted a last year's Bullock Oriole's nest, which would not have attracted a second glance, with the newer nest hard



Taken in Douglas County.

Photo by W. L. Dawson

COLD SPRING LAKE.

THE ORIOLE-KINGBIRD NEST APPEARS NEAR THE TOP OF THE PROTECTING TREE

by, had it not been for the constant solicitude of a pair of Kingbirds. Investigation showed that the ancient pocket had been crammed full of grass and twigs, and that it contained two fresh eggs of the Flycatcher. Ordinarily the nest is placed in an upright or horizontal fork of a tree at a height of from three to forty feet. Twigs, weed-stalks, and trash of any kind enter into the basal construction. The characteristic feature of the nest, however, is the mould, or matrix, composed of vegetable plaster, ground wood, and the like, or else of compacted wool and cow-hair, which is forced into the interstices of the outer structure and rounded inside, giving shape to the whole. This cup, in turn, is lined with fine grasses, cow-hair, or variously. Occasionally, nests are found composed almost entirely of wool. In others string is the principal ingredient.

Altho the Kingbird never sings, it has a characteristic and not unmusical *tee, tizie, tizie* (spell it *phthisic*, if you favor the old school) or *tsee tsee tsee* (in an unbroken combination of syllables which are capable of assuming various degrees of excitement and emotion).

In eastern Washington this Kingbird is common and well distributed, though far less abundant than the larger, grayer "Western." West of the Cascades it is rare but regular, being found chiefly along the wooded margins of lakes.

No. 143.

WESTERN KINGBIRD.

A. O. U. No. 447. *Tyrannus verticalis* Say.

Synonyms.—ARKANSAS KINGBIRD. ARKANSAS FLYCATCHER.

Description.—*Adult Male*: Foreparts, well down on breast, and upper back ashy gray, lightening, nearly white, on chin and upper throat, darker on lores and behind eye; a partially concealed crown-patch of orange-red (Chinese orange); lateral boundaries of this patch olivaceous; back, scapulars, and rump ashy glossed with olive-green; this color shading to black on upper tail-coverts; wings fuscous; tail black, the outer web of outermost rectrix white, or faintly tinged with yellow; underparts below breast rich canary yellow, paler on wing-linings and lower tail-coverts; bill and feet black; iris brown. *Adult Female*: like male but crown-patch usually somewhat restricted, and primaries much less attenuated. *Young birds* are duller and browner without crown-patch, and with little or no olivaceous on back; the yellow of underparts is paler (sulphury or even whitish), and the primaries are scarcely or not at all attenuated. Length of adult males about 9.00 (228.6); wing 5.12 (130); tail 3.68 (93.5); bill .73 (18.7); tarsus .74 (18.8). Females average less.

Recognition Marks.—Chewink to Robin size; noisy, petulant ways; ashy foreparts and yellow belly distinctive.

Nesting.—*Nest*: of twigs, grasses, string, wool, and other soft substances, placed at moderate heights in bushes or trees, or more commonly on beams and

ledges of barn or outbuildings. *Eggs*: 3-5, like those of *T. tyrannus*, but averaging smaller, .93 x .68 (23.6 x 17.3). *Season*: first week in June; one brood.

General Range.—Western United States, north regularly to southern British Columbia, occasionally to Alberta, Assiniboia, and Manitoba, north to western Minnesota, eastern Nebraska, and western Texas, breeding thruout range, and south to Chihuahua, Mexico; south in winter thru Mexico to highlands of Guatemala.

Range in Washington.—Common summer resident east of the Cascades, rare or casual on the West-side.

Migrations.—*Spring*: c May 1st; Wallula April 26, 1905; Yakima April 30, 1900; Chelan May 11, 1896.

Authorities.—Baird, Rep. Pac. R. R. Surv. IX. 1858, p. 174. T. C&S. D¹. D². Ss¹. Ss². J. B. E.

Specimens.—U. of W. P¹. Prov. B. E.

HERE is the presiding genius of all properly conducted ranches upon the sunny side of the Cascade Mountains. Guest he is not, host rather; and before you have had time to dismount from your panting cayuse this bird bustles forth from the locust trees and hovers over you with noisy effusive-



Taken in Douglas County.

WESTERN KINGBIRD AT NEST.

Photo by the Author.

ness. The boisterous greeting is one-third concern for his babies in the locust tree hard-by, one-third good fellowship, and the remainder sheer restlessness. The Western Kingbird is preeminently a social creature. And by social in this case we mean, of course, inclined to human society. For, altho the bird may start



in Douglas County.

Plate I

"SCOTTS THEY ARE."

up with vociferating cries every time a member of the besieged household sets foot out of doors one is reminded by these attentions rather of a frolicsome puppy than of a zealous guardian of peace. Those who have been most honored by their presence year after year claim that the bird become fond of certain members of the family, and allow a familiarity in nest inspection which would be shriekingly resented in the case of strangers.

One can readily guess a utilitarian consideration in favor of ranch life, viz., the great scarcity and abundance of insects afforded by some of the Kingbirds make a partial monopoly by reason of that abundance

in man. They are fond of flies, moths, sawflies, crickets, winged ants, and all that sort of thing. Moreover, they are fond of the Rancher! Don't grab that shot-gun and begin scolding [laughter] the old man (Haw). A big keeper in California was a great one for point

and dissected over a hundred specimens of Western Kingbirds and Phœbes, using a microscope in the examination of stomach contents. The birds had been shot about the apiaries, where they had been seen darting upon and catching bees. Altho many of the birds were gorged, no working bees were found, only drones. This is an important distinction to bear in mind, for the reduction of drones is unqualifiedly beneficial. And when one stops to think of it, it is absurd to suppose that a bird could swallow bees, stings and all, with impunity.

But the real secret of Kingbird's attachment for mankind is not discovered until we see his nest. It is our *strings* which have won his heart. Whatever else the nest may or may not contain, it is sure to have string,—string in strands, string in coils, string in bunches, hanks, and tangles, drug store string of a dissipated crimson hue, white string that came around the sugar, greasy string that you had tied around your finger to remind you to feed the chickens, string of every length and size and use and hue.

Those Western Kingbirds which have not yet adopted men manage to subsist somewhat after the fashion of their eastern cousins, and build a nest of twigs, grass, weed-stalks, bark strips, and cottonwood down, placing it against the trunk, or saddling it upon a horizontal fork of willow, poplar, cottonwood, or pine, usually near water. One we found in Douglas County built in a small willow which emerged from a shallow lake, a hundred feet from shore.

But, more commonly, nests are placed about crannies and projections of farm buildings, fences, unused wagon-ricks, or upon the house itself. If no

such conveniences offer, a shade tree is second choice, and the nest includes all the soft waste which the farm affords, bits of cloth, wool, cow-hair, feathers, and *string*.

Eggs to the number of 4 or 5 are deposited from the 1st to the 15th of June.



Taken at Stratford.

Photo by the Author.

A DIVIDED HOUSE.

Beauties they are too, creamy white with bold and handsome spots of chestnut in two shades, and lilac-gray. Incubation is accomplished in twelve or thirteen days, and the youngsters fly in a matter of two weeks.

These Kingbirds are model parents, devoted in brooding and courageous in defense. Noisy they are to a fault, gurrulous in an unnumbered host of cajolatives and ecstasies, as well as expletives. Unlike the members of *Tyrannus tyrannus*, they are good neighbors even among their own kind. At the call of need neighbors rally to the common defense, but this is usually in villages where demesnes adjoin. On several occasions I have found other birds nesting peaceably in the same tree with these Kingbirds; and, as in the case of *T. tyrannus*, Bullock Orioles appear to be rather particular friends.

The nests shown in the cut on preceding page are the work of one pair of birds. Embarrassed by a wealth of string and unable to decide which of two good locations to utilize, the birds built in both; the female laid eggs in both, three in one and two in the other. Moreover, she sat in both, day and day about, a bird of a divided mind.

No. 144.

ASH-THROATED FLYCATCHER.

A. O. U. No. 454. *Myiarchus cinerascens* (Lawrence).

Description.—*Adults*: Above dull grayish brown changing to clear brown on crown; wings dusky brown, the middle and greater coverts tipped broadly, and the secondaries edged with pale buffy brown or dull whitish, the primaries edged, except toward tips, with cinnamon-rufous; tail darker than back, with paler grayish brown edgings, that of outermost rectrix sometimes nearly white; tail feathers, except central pair, chiefly cinnamon-rufous on inner webs; sides of head and neck gray (slightly tinged with brown) fading into much paler gray on chin, throat, and chest, changing to pale yellowish on breast and remaining underparts; yellow of underparts strengthening posteriorly, and axillars and under wing-coverts clear (primrose) yellow. Bill blackish; feet and legs black; iris brown. Length of adult male about 8.35 (212); wing 3.94 (100); tail 3.63 (92); bill .75 (19); tarsus .61 (23).

Recognition Marks.—Chewink size; brownish gray above; ashy throat shading into pale yellow of remaining underparts.

Nesting.—*Nest*: a natural cavity or deserted Flicker hole, copiously lined with wool, hair, or other soft materials. *Eggs*: 3-6, usually 4, buffy or creamy as to ground, but heavily marked, chiefly in curious lengthwise pattern, with streaks of purplish chestnut of several degrees of intensity. Av. size, .88 x .65 (.224 x .165). *Season*: first week in June; one brood.

General Range.—Western United States and northern Mexico, north irregularly to Washington; south in winter thru Mexico to Guatemala.

Range in Washington.—Breeding near North Yakima in summer of 1903; one other record, Tacoma May 24, 1905.

Authorities.—Snodgrass (R. E.), Auk. Vol. XXI, Apr. 1904, p. 229. B.

Specimens.—P. C.

FLYCATCHERS are somewhat given to wandering, or at least exploring, on their own account, regardless of traditions. A Gray Kingbird (*Tyrannus dominicensis*), normally confined to the Gulf of Mexico, is of record for Cape Beale on Vancouver Island; and that dashing gallant, the Scissor-tailed Flycatcher, of Texas, has ventured as far north as Hudson Bay. The Ash-throated Flycatcher is typically a bird of the south-western United States; but it is not altogether surprising that it should have extended its northern range into the Upper Sonoran belt of eastern Washington, as it did in the season of 1903, when it was observed at North Yakima by Mr. Bowles, and, independently, by Mr. Robert E. Snodgrass, the latter collecting for Pullman College. Without precedent or excuse, however, was the appearance of a handsome pair near Tacoma, as recorded by Mr. Bowles, on the 24th day of May, 1905.

"The Ash-throated Flycatcher is quite expert upon the wing but never indulges in protracted flight if it can help it. It seems to be rather quarrelsome and intolerant in its disposition toward other birds, and will not allow any to nest in close proximity; in fact, I am inclined to believe that it not infrequently dispossesses some of the smaller Woodpeckers of their nesting sites.

"Its food consists mainly of beetles, butterflies, grasshoppers, flies, moths, and occasionally of berries, especially those of a species of mistletoe.

"By the beginning of May most of the birds are mated, and nidification begins shortly afterward. The nests are usually placed in knot-holes of mesquite, ash, oak, sycamore, juniper, and cottonwood trees, as well as in cavities of old stumps, in Woodpeckers' holes, and occasionally behind loose pieces of bark, in the manner of the Creepers.

"The Ash-throated Flycatcher nests at various heights from the ground, rarely, however, at greater distances than twenty feet. The nest varies considerably in bulk according to the size of the cavity used. Where this is large the bottom is filled up with small weed-stems, rootlets, grass, and bits of dry cow- or horse-manure, and on this foundation the nest proper is built. This consists principally of a felted mass of hair and fur from different animals, and occasionally of exuvie of snakes and small lizards; but these materials are not nearly as generally used as in the nests of our eastern Crested Flycatcher—it fact, it is the exception and not the rule to find such remains in their nests" (Bendire).

SAY'S PEWEE.

A. O. U. No. 457. *Sayornis saya* (Bonap.).

Synonyms.—SAY'S PHOEBE. WESTERN PHOEBE.

Description.—*Adults:* General color drab (grayish brown to dark hair-brown), darker on pileum and auriculars, lighter on throat, shading thru upper tail-coverts to black; tail brownish black; wings fuscous, the coverts and exposed webs of tertials edged with lighter grayish brown; underparts below breast cinnamon-buff; axillars and lining of wings light buff or cream-buff. Bill and feet black; iris brown. *Young birds* are more extensively fulvous, and are marked by two cinnamonaceous bands on wings (formed by tips of middle and greater coverts). Length of adult male 7.50 (100.5); wing 4.14 (105); tail 3.23 (82); bill .62 (15.7); tarsus .70 (29). Female averages smaller.

Recognition Marks.—Sparrow size; drab coloring; cinnamon-colored belly; melancholy notes; frequents barns and outbuildings or cliffs.

Nesting.—*Nest:* composed of dried grasses, moss, plant-fibers, woolly materials of all sorts, and hair; placed on ledges, under eaves of outbuildings, under bridges, or on cliffs. *Eggs:* 3-6, usually 5, dull white, occasionally sparsely dotted. Av. size, .77 x .50 (19.6 x 15). *Season:* April 20-May 10, June 1-15; two broods. Yakima County April 24, 1900, 5 young about five days old (eggs fresh about April 7th).

General Range.—Western North America north to the Arctic Circle in Alaska, Yukon Territory, etc., east to Manitoba, western Wyoming, western Kansas, etc., breeding thruout range, south to Arizona and northern Lower California; southward in winter over northern and central Mexico.

Range in Washington.—Common summer resident east of the Cascades (chiefly in Upper Sonoran and Arid Transition life-zones), rare or casual west of the mountains.

Migrations.—*Spring:* c March 15; Okanogan County March 17, 1896; Mt. Rainier (Yakima Co.) Feb. 20, 1900.

Authorities.—Bendire, Life Hist. N. A. Birds, Vol. 11, 1895, p. 277. (T).
 B. G. E. S. 1895.

Specimens.—1st. Prov. C.

A GENTLE melancholy possesses the Pewee. The memory of that older Eden once blotted by the ruthless ice-sheet, still haunts the chambers of the atavistic soul and she goes mourning all her days. Or she is like a Peri barred from Paradise, and no proffer of mortal joys can make amends for the immortal loss ever before her eyes. *Kutécé, kutécé!*

In keeping with her ascetic nature the Pewee haunts solitary places, bleak hillsides swept by March gales, lava cliffs with their solemn, silent bastions. Or, since misery loves company, she ventures upon some waterless

townsite and voices in unexpected cadences the universal yearning for green things and cessation of wind.

A part of the drear impression made by this bird is occasioned by the time of year when it puts in an appearance, March at the latest, and, once at least, as early as February 20th (in Yakima County). Flies are an uncertain crop at this season, and it is doubtless rather from a desire for shelter than from inclination to society, that the species has so largely of late years resorted to stables and outbuildings. Twenty years ago Say's Pewee was unknown as a tenant of buildings in Yakima County. Now, there are few well-established farms in that part of the State which do not boast a pair somewhere about the premises; while hop-houses are recognized as providing just that degree of isolation which the bird really prefers.

Say's Pewee, for all its depressed spirits, is an active bird, and makes frequent sallies at passing insects. These constitute its exclusive diet save in early spring when, under the spell of adverse weather, dried berries are sought. Butterflies and moths are favorite food, but grasshoppers and beetles are captured as well; and the bird, in common with certain other flycatchers, has the power of ejecting indigestible elytra and leg-sheathings in the form of pellets.

The males arrive in spring some days in advance of the females. Courtship is animated in spite of the melancholy proclivities of the bird; and the male achieves a sort of song by repeating *ku-tew's* rapidly, on fluttering wing. Besides this, in moments of excitement, both birds cry *Look at 'ere*, with great distinctness.

Eggs are laid by the 10th of April and usually at least two broods are raised, in this latitude. In the natural state these Pewees nest about cliffs, at moderate heights, and in shallow caves. In selecting a site, they show a decided preference for a cliff which enjoys the protection of nesting Prairie Falcons. A stout bracket of twigs, weed-fibers, lichens, and other soft substances, is constructed, and a luxurious lining of wool and hair is supplied; but the whole must be partially shielded by some projecting tooth or facet of stone, or artificial construction.

The author in taking his first (and only) set of Say Pewee eggs selected a nest on the south wall of Brook Lake, reached only by canoe. The floor of an



Photo by
the Author.

SAY'S PEWEE.

old Cliff Swallow's nest, placed in a shady niche at a height of some twelve feet, formed the support of the Pewee's accumulations. The cliff was perfectly straight, but by dint of half an hour's work piling lava blocks and securing footholds, with the aid of a double-bladed paddle he succeeded in reaching the nest. Requiring the use of both hands in descent, he placed the four fresh eggs in his hat, and the hat in his teeth, reaching the ground safely and depositing the hat carefully. Tired out by the exertion he flung himself down upon the narrow strip of shore and rested. Then noting the rising wind, he sprang up, seized the coat and hat and—Oh! Did something drop? ! ! Yes, gentle reader, the eggs were in it,—but only one was smashed. Only one! As perfect the arch without its keystone as a "set" of eggs with the guilty consciousness of one missing!

No. 146.

OLIVE-SIDED FLYCATCHER.

A. O. U. No. 459. *Nuttallornis borealis* (Swains.)

Description.—*Adult*: Upperparts brownish slate with a just perceptible tinge of olivaceous on back; top of head a deeper shade, and without olivaceous; wings and tail dusky-blackish, the former with some brownish gray edging only on tertials; flank-tufts of fluffy, yellowish or white feathers, sometimes spreading across rump and in marked contrast to it, but usually concealed by wings; throat, belly and crissum, and sometimes middle line of breast, white or yellowish white; heavily shaded on sides and sometimes across breast with brownish gray or olive-brown,—the feathers with darker shaft-streaks; bill black above, pale yellow below; feet black. *Immature*: Similar to adult, but coloration a little brighter; wing-coverts fulvous or buffy. Length 7.00-8.00 (177.8-203.2); wing 4.10 (105.7); tail 2.64 (67.1); bill from nostril .53 (13.5); tarsus .50 (12.5).

Recognition Marks.—Sparrow to Chewink size; heavy shaded sides; bill yellow below; *tete-tete* note; keeps largely to summits of fir trees.

Nesting.—*Nest*: a shallow cup of twigs, bark-strips, etc., lined with coarse moss and rootlets; saddled upon horizontal limb of coniferous trees, often at great heights. *Eggs*: 3 or 4, creamy-white or pale buff, spotted distinctly with chestnut and rufous, and obscurely with purplish and lavender, chiefly in ring about larger end. Av. size, .85 x .63 (21.6 x 16). *Season*: June 1-15; one brood.

General Range.—North America, breeding from the northern and the higher mountainous parts of the United States northward to Hudson Bay and Alaska. Accidental in Greenland. In winter south to Central America, Colombia and northern Peru.

Range in Washington.—Summer resident in coniferous timber from sea level to limit of trees.

Migrations.—*Spring*: c. May 15.

Authorities.—*Contopus borealis*, Baird, **Baird**, Rep. Pac. R. R. Surv. IX, 1858, p. 189. *Ibid* C&S, 160. C&S, D^o, Kb. Ra. B. E.

Specimens.—U. of W. P^o, Prov. B. E.

FLYCATCHERS belong to the sub-order *Clamatores*, that is to say, Shouters. Some few of our American Flycatchers lip and sigh rather than cry aloud, but of those which shout the Olive-sided Flycatcher is easily dean. And it is as an elocutionist only that most of us know this bird, even tho our opportunities may have stretched along for decades. On a morning in mid May, as surely as the season comes around, one hears a strong insistent voice shouting, "*See here!*" There is not much to see, save



CASCADE PASS AND THE VALLEY OF THE STEHEKIN
A CHARACTERISTIC HAUNT OF THE OLIVE-SIDED FLYCATCHER

a dun-colored bird seated at an impossible height on the summit of a tall fir tree. Its posture is that easy half-slouch which with the Flycatchers betokens instant readiness for action. While we are ogling, the bird launches from his post, seizes an insect some thirty feet distant, and is back again before we have recovered from surprise. "*See here!*" the bird repeats, but its accent is unchanged and there is really nothing more to see.

An intimate acquaintance with the Olive-sided Flycatcher is not easily attained; but its characteristic cry carries to a distance of half a mile or

more, and is, fortunately, quite unforgettable. Both in accent and energy it seems to set the pace for several of the lesser Tyrants. Of course, like many another of the voices of Nature, its interpretation depends a good deal upon the mood of the listener. Heard on a dull day at sea-level it may sound dismal enough, but heard in the sharp air of the mountains it becomes an exultant note. There are miners in the heart of the Cascades who regard the brisk evening greeting of this Flycatcher as one of the compensations of solitude. "*Three cheers!*" the bird seems to say to one who returns from the silent bowels of the earth and grasps again the facts of outer life.

Borealis is a bird of the tree-tops and nearer you cannot come, save in nesting season, when caution is thrown to the winds and a study in morbid psychology is all too easy. The birds place a rustic saucer of interwoven black rootlets and mosses on the upper side of a horizontal branch, whether of hemlock, fir, or cedar, and, as often as otherwise, at moderate heights. They are very uneasy at the presence of strangers and flit about with a restless, tittering cry, *tee-tee, tee-tee*, or *tee-tee-tee*, a sound which strangely excites the blood of the oölogist. Once the nesting tree is made out and the ascent begun, the birds are beside themselves with rage, and dash at the intruder with angry cries, which really stimulate endeavor where they are intended to discourage it.

How fatal is the beauty of an egg-shell! There be those of us who have drunk so oft of this subtle potion that the hand goes out instinctively to grasp the proffered cup. Besides, the product of an Olive-side's skill is of a very special kind—a rich cream-colored oval, warmed by a hint of living flesh and splotted with saucy chestnut. It is irresistible! But, boys, don't do it! We are old toppers ourselves; public sentiment is against us, and our days are numbered. It is right that it should be so. Besides that, and speaking in all seriousness now, while it is desirable and necessary that a few representative collections of natural history should be built up *for the public use*, it does not follow that the public good is secured by the accumulation of endless private hordes of bird's-eggs—whose logical end, in ninety-nine cases out of a hundred, is the scrap-heap. You are probably one of the ninety-nine. Think twice before you start a collection and then—don't!

No. 147.

WESTERN WOOD PEWEE.

A. O. U. No. 462. *Myiochanes richardsonii* (Swains.).**Synonyms.**—SHORT-LEGGED PEWEE. RICHARDSON'S PEWEE.

Description.—*Adults:* Above deep grayish brown or grayish olive-brown; a lighter shade of same continued around sides and across breast, lightening on chin and throat, on remaining underparts becoming white or yellowish white; middle and greater coverts tipped with grayish; outer webs of tertials edged with grayish white. Bill black above, dusky (never light) below. *Young birds* have the middle and greater coverts tipped with buffy (forming two not inconspicuous bars), and some buffy edging on rump and upper tail-coverts. This species bears a curiously close resemblance to *M. virens* of the East, inasmuch that it is not always possible to separate specimens in the cabinet; yet the two are perfectly distinct in note and habit and are not suspected of intergradation. Length of adult males 6.00-6.50 (152.4-165.1); wing 3.43 (87); tail 2.60 (66); bill .51 (13); tarsus .53 (13.4). Females a little smaller.

Recognition Marks.—Sparrow size; dark coloration (appearing blackish),—but much darker and a little larger than any of the *Empidonaces*. *Meezer* note of animated melancholy distinctive.

Nesting.—*Nest:* a shallow cup of compacted moss, grasses, rootlets, etc., lined with fine grasses and wool or hair, and decorated externally, or not, with lichens; saddled midway or in fork of horizontal limb, chiefly at moderate heights. *Eggs:* usually 3, sometimes 4, creamy white, marked by largish spots of distinct and obscure rufous brown orumber, chiefly in open wreath about larger end. Av. size, .71 x .55 (18 x 14). *Season:* June 10-July 10; one brood.

General Range.—Western North America; breeding north to Alaska and Northwest Territory, east to Manitoba and western portion of Great Plains to Texas, south to northern Mexico; south in winter over Mexico and Central America to Ecuador, Peru, and Bolivia.

Range in Washington.—Common summer resident and migrant east of the Cascades, chiefly in coniferous forests, occasionally in open sage; less common west of the mountains.

Migrations.—*Spring:* c. May 15; Tacoma May 5, 1907; Yakima May 14, 1895, May 15, 1900; Newport May 20, 1906; Concomully May 27, 1896. *Fall:* c. Sept. 1.

Authorities.—["Western Wood Pewee," Johnson, Rep. Gov. W. T. 1884 (1885), 22.] ? *Muscicapa richardsonii*, Aud. Orn. Biog. V. 1839, pl. 434. [*Contopus richardsonii*, Baird, Rep. Pac. R. R. Surv. IX, 1858, 189, 190. "Columbia River O. T. J. K. Townsend."] *Contopus richardsonii*(?) **Belding**, L. B. P. D. 1890, p. 99 (Walla Walla, Dr. J. W. Williams). L¹. Rh. D¹. Kb. Ra. D². J. B. E.

Specimens.—U. of W. P¹. Prov. B. E.

THE prey of gentle melancholy and the heir to gloom is this Pewee of the West. The day, indeed, is garish. The leaves of the fragrant cotton-woods glance and shimmer under the ardent sun; while the wavelets of the lake, tired of their morning romp, are sighing sleepily in the root-laced chambers of the overhanging shore. The vision of the distant hills is blurred by

heat pulsations; the song of birds has ceased and the very caddis-flies are taking refuge from the glare. The sun is dominant and all Nature yields drowsy allegiance to his sway. All but Pewee. He avoids the sun, indeed, but from a sheltered perch he lifts a voice of protest, "*Dear Me!*"



WESTERN WOOD PEWEE.

It seems uncalled-for. The bird does not appear to be unhappy. Flycatching is good, and the Pewee cocks his head quite cheerfully as he returns to his perch after a successful foray. But, true to some hidden impulse, as you gaze upon him, he swells with approaching effort, his mandibles part, and he utters that doleful, appointed sound, *dear me*. His utterance has all the precision and finality of an assigned part in an orchestra. It is as if we were watching a single player in a symphony of Nature whose other strains were too subtle for our ears. The player seems inattentive to the music, he eyes the ceiling languidly, he notes

a flashing diamond in the second box, he picks a flawed string absently, but at a moment he seizes the bow, gives the cello a vicious double scrape, *dear me*, and his task is done for that time.

The Western Wood Pewee is a late migrant, reaching the middle of the State about the 15th of May, and the northern border from five to ten days later. It is found wherever there is timber, but is partial to half-open situations, and is much more in evidence East than West. It is especially fond of pine groves and rough brushy hillsides near water. Cannon Hill, in

Spokane, is a typical resort and a mere tyro can see three or four nests there on a June day.

The Pewee takes the public quite into her confidence in nest building. Not only does she build in the open, without a vestige of leafy cover, but when she is fully freighted with nesting material, she flies straight to the nest and proceeds to arrange it with perfect nonchalance. If a nest with eggs is discovered in the bird's absence, she is quite likely to return and settle to her eggs without a troubled thought.

The nest is a moderately deep, well-made cup of hemp, fine bark-strips, grasses, and similar soft substances; and it is usually saddled upon a horizontal limb of pine, larch, maple, alder, oak, aspen, cottonwood, etc. But, occasionally, the nest is set in an upright crotch of a willow or some dead sapling. Nests having such support are naturally deeper than saddled nests, but the characteristic feature of both sorts is the choice of a site, quite removed from the protection of leaves. The grayish tone of the bark in the host tree is always accurately matched in the choice of nesting materials and, if the result can be secured in no other way, the exterior of the nest is elaborately draped with cobwebs.

All eggs appear beautiful to the seasoned oölogist, but few surpass in dainty elegance the three creamy ovals of the Pewee, with their spotting of quaint old browns and subdued lavenders. They are genuine antiques, and the connoisseur must pause to enjoy them even tho he honors the prior rights of Mr. and Mrs. *M. Richardson*.

No. 148.

WESTERN FLYCATCHER.

A. O. U. No. 464. *Empidonax difficilis* Baird.

Synonym.—WESTERN YELLOW-BELLIED FLYCATCHER.

Description.—*Adults:* Above and on sides of breast olive or olive-green; a lighter shade of same color continued across breast; remaining underparts yellow (between sulphur and primrose), sordid on throat and sides, clearest on abdomen; bend of wing sulphur-yellow; a faint yellowish eye-ring; axillaries and lining of wings paler yellow; middle coverts and tips of greater coverts, continuous with edging of exposed secondaries, yellowish gray, forming two more or less conspicuous wing-bars. Bill brownish black above, yellow below; feet and legs brownish dusky; iris brown. *Young birds* are browner above and paler below; wing-bars cinnamon-buff, (and not certainly distinguishable in color from young of *E. traillii*). Length 5.50-6.00 (139.7-152.4); wing 2.64 (67); tail 2.24 (57); bill .47 (12); tarsus .67 (17).

Recognition Marks.—Warbler size; characterized by pervading yellowness;

—really the easiest, because the most common of this difficult group; note a soft *psiccit*; a woodland recluse. Adults always more yellow than *E. traillii*, from which it is not otherwise certainly distinguishable afield (save by note).

Nesting.—*Nest*: placed anywhere in forest or about shaded cliffs, chiefly at lower levels; usually well constructed of soft green moss, fine grasses, fir needles and hemp. *Eggs*: 3 or 4, dull creamy white, sparingly spotted and dotted or blotched with cinnamon and pinkish brown, chiefly about larger end. Av. size .66 x .52 (16.8 x 13.2). *Season*: May 1-July 1; one or two broods.

General Range.—Western North America from the eastern base of the Rocky Mountains to the Pacific, breeding north to Sitka and south chiefly in the mountains to northern Lower California and northern Mexico; south in winter into Mexico.

Range in Washington.—Common summer resident in timbered sections throught the State.

Migrations.—*Spring*: Seattle-Tacoma, April 15. *Fall*: c. Sept. 1.

Authorities.—*Empidonax difficilis*, **Baird**, Rep. Pac. R. R. Surv. IX, 1858, p. 103 "Catal. No. 5020." L. D. Ra. Sst. Sst. B. E.

Specimens.—(U. of W.) P. Prov. B. B.N. E.

PLEASE observe the scientific name, *difficilis*, that is, difficult. There is a delicate irony about the use of this term as a distinctive appellation for one of the "gnat kings," for, surely, the plural, *Empidonaces difficiles*, would comprehend them all. There is something, indeed, to be learned from the notes of these little Flycatchers, and the first year the author studied them seriously he supposed he had a sure clew to their specific unraveling. But that was in the freshmen year of Empidonaxology. In coming up for "final exams," he confesses to knowing somewhat less about them.

The bird, also, is well called Western; for however difficult the genus, we know at least that *difficilis* (speaking seriously now) is the commonest species; that it appears under more varied conditions and enjoys a more general distribution than any other species of *Empidonax* in the West. The bird is, also, the first to arrive in the spring, returning to the latitude of Seattle about the middle of April, or when the yellow-green racemes of the Large-leaved Maple (*Acer macrophyllum*) are first shaken out to the breeze. The little fay keeps well up in the trees, occupying central positions rather than exposed outposts; and so perfectly do his colors blend in with the tender hues of the new foliage that we hear him twenty times to once we see him.

The notes are little explosive sibilants fenced in by initial and final "p" or "t" sounds. If one prints them they are not at all to be vocalized, but only whispered or hissed, *pssect*, *pssectit*, *psseit*, or *psseit*. Other variations are *sé a-seit*, slowly and listlessly; *chotip*, briskly; *kushchitlip*, a fairy sneeze in Russian. One becomes familiar with these tiny cajonations, and announces the Western Flycatcher unseen with some degree of confidence. But the way is beset with dangers and surprises. Once, in June, at a point on Lake Chelan,

after an hour's discriminating study, I shot from practically the same stand, three birds which said *sweet*, *pisawit*, and *pisoo* respectively, and picked up a Wright's Flycatcher (*E. wrightii*), a Western Flycatcher (*E. difficilis*) and a Trail Flycatcher (*E. traillii*). The same woods contained Hammond's Flycatcher (*E. hammondi*), while the Western Wood Pewee (*Myiochanes richardsonii*), which has the same general economy, was abundant also. *Difficilis? Etiam!*

The Western Flycatcher inhabits the deepest woods and occurs thruout the State wherever sufficient shade is offered. It is rather partial to well-watered valleys, and will follow these well up into the mountains, but does not occur on the mountain-sides proper at any considerable altitude. Nor does it appear to visit, save during migrations, those green oases in the dry country which are the delight of *E. traillii*. It mingles with *traillii* in summer along the banks of streams and at the edges of swamps; with *hammondi* in the more open woods and along the lower hillsides; with *wrightii* along the margin of mountain lakes and streams; but in the forests proper it is easily dominant.

The Western Flycatcher is a catholic nester. It builds almost always a substantial cup of twigs, grasses, and hemp, lined with grass, hair or feathers. The outside is usually plentifully bedecked with moss, or else the whole structure is chiefly composed of this substance—not, however, unless the color-tone of the immediate surroundings will permit of it. In position it varies without limit. We find nests sunk like a Solitaire's in a mossy bank, or set in a niche of a rocky cliff, on logs, stumps, or beams, in a clump of ferns, or securely lodged in a fir tree at a height of forty feet. One I found in a swamp was saddled on the stem of a slanting vine maple without a vestige of cover other than that afforded by the general gloom.

Eggs to the number of three or four, rarely five, are deposited late in May or early in June, and only one brood is raised in a season. The eggs are of a dull creamy white color, spotted and blotched rather lightly with cinnamon brown and pinkish buff, easily distinguishable from all others save those of the Trail Flycatcher.



Lichen near Tacoma.
Photo by J. H.

NEST OF WESTERN
FLYCATCHER

These Flycatchers in nesting time are very confiding and very devoted parents. One may sometimes touch the sitting bird, and, when off, she flutters about very close to the intruder, sneezing violently and snipping her mandibles like fairy scissors.

No. 149.

TRAILL'S FLYCATCHER.

A. O. U. No. 466. *Empidonax traillii* (Aud.).

Synonyms.—LITTLE FLYCATCHER. LITTLE WESTERN FLYCATCHER.

Description.—Plumage of upperparts very similar to that of *E. difficilis*, but olive inclining to brownish; wing-bars usually paler, more whitish; outer web of outer rectrix pale grayish white; sides of head and neck decidedly browner; underparts everywhere paler, nearly white on throat; breast sordid, scarcely olivaceous; lower abdomen and crissum pale primrose yellow; bend of wing yellow flecked with dusky; a faint eye-ring pale olive-gray. Bill black above, light brownish below (not so light in life as *E. difficilis*). *Young*: much as in preceding species, but averaging browner; more yellow below than adult. Length 5.50-6.00 (139.7-152.4); wing 2.76 (.70); tail 2.25 (.57); bill .49 (.12.5); tarsus .65 (.16.5).

Recognition Marks.—Warbler size; olivaceous coloration; not so yellow below as preceding species; brush-haunting habits; note a smart *sweet'choo*.

Nesting.—*Nest*: a rather bulky but neatly-turned cup of plant-fibres, bark-strips, grass, etc., carefully lined with fine grasses; placed three to ten feet up, in crotch of bush or sapling of lowland thicket or swamp. *Eggs*: 3 or 4, not certainly distinguishable from those of preceding species. Av. size, .70 x .54 (.17.8 x .13.7). *Season*: June; one brood.

General Range.—Western North America, breeding north to southern Alaska (Dyer), east, northerly, to western portion of Great Plains, much farther southerly, breeding in Iowa (?), Missouri, southern Illinois, and probably elsewhere in central Mississippi Valley; south in winter over Mexico to Colombia, etc.

Range in Washington.—Imperfectly made out—summer resident in thickets at lower levels thruout (?) the State.

Authorities.—*Empidonax pusillus* Cabanis, **Baird**, Rep. Pac. R. R. Surv. IX, 1858, p. 105. *Ibid.* C&S, 170. (T). C&S, L. D. Ra. B. E.

Specimens.—(U. of W.) Prov. B. E.

DISCRIMINATION is the constant effort of those who would study the Empidonaces, the Little Flycatchers. Comparing colors, Traill's gives an impression of brownness, where the Western is yellowish green, Hammond's blackish, and Wright's grayish dusky. These distinctions are not glaring, but

they obtain roughly afield, in a group where every floating mote of difference is gladly welcomed. The Traill Flycatcher, moreover, is a lover of the half-open situations, bushy rather than timbered, of clearings, low thickets, and river banks. Unlike its congeners, it will follow a stream out upon a desert; and a spring, which gladdens a few hundred yards of willows and *cratægi* in some nook of the bunch-grass hills, is sure to number among its summer boarders at least one pair of Traill Flycatchers. This partiality for water-courses does not, however, prevent its frequenting dry hillsides in western Washington and the borders of mountain meadows in the Cascades.

Traill's Flycatcher is a tardy migrant, for it arrives not earlier than the 20th of May, and frequently not before June 1st. In 1899, the bird did not appear at Ahtanum, in Yakima County, until the 14th of June; and it became common immediately thereafter. This bird is restless, energetic, and pugnacious to a fault. It posts on conspicuous places, the topmost twig of a syringa bush, a willow, or an aspen, making frequent outcries, if the mood is on, and darting nimbly after passing insects. During the nesting season it pounces on passing birds of whatever size and drives them out of bounds. It is not always so hardy in the presence of man, and if pressed too closely will whisk out of sight for good and all.

The notes of the Little Flycatcher, as it used to be called, are various and not always distinctive. Particularly, there is one style which cannot be distinguished from the commonest note of the Hammond Flycatcher, *switchoo*, *swécchéw*, or unblushingly, *zwécchéw*, *zwécchéw*, *zwécet*. Other notes, delivered sometimes singly and sometimes in groups, are *pisóó*; *swil'oo*, *swécet*, *swil'oo*; *Swéc*, *kutíp*, *kutíp*; *Hwit* or *hooit*, softly.

Nesting begins late in June and fresh eggs may be expected about the 4th of July. Nests are placed characteristically in upright forks of willows, alder-berry bushes, roses, etc. They are usually compact and artistic structures of dried grasses, hemp (the inner bark of dead willows) and plant-down, lined with fine grasses, horse-hair, feathers and other soft substances. Not infrequently the nests are placed over water; and low elevations of, say, two or three feet from the ground appear to prevail westerly. A Yakima County nest, taken July 10th, containing two eggs, was half saddled upon, half sunk into the twigs of a horizontal willow branch one and a half feet above running water, and had to be reached by wading.

Incubation lasts twelve days, and the babies require as much more time to get a-wing. But by September 1st, tickets are bought, grips are packed—or, no! think of being able to travel without luggage—goodbyes are said; and it's "Heighho! for Mexico!"

No. 150.

HAMMOND'S FLYCATCHER.

A. O. U. No. 468. *Empidonax hammondi* (Xantus).**Synonym.**—DIRTY LITTLE FLYCATCHER.

Description.—*Adult*: Above olive-gray inclining to ashy on foreparts,—color continued on sides, throat and breast well down, only slightly paler than back; remaining underparts yellowish in various degrees, or sometimes scarcely tinged with yellow*; pattern and color of wing much as in preceding species; outermost rectrix edged with whitish on outer web; bill comparatively small and narrow, black above, dusky or blackish below. *Young birds* present a minimum of yellow below and their wing-markings are buffy instead of whitish. Length about 5.50 (1.39.7); wing 2.80 (.71); tail 2.29 (.58); bill .41 (.10.5); breadth of bill at nostril .10 (.4.83); tarsus .63 (.16). Females average a little smaller.

Recognition Marks.—Warbler size, the smallest of the four Washington *Empidonax*es, and possibly the most difficult (where all are vexing); olive-gray of plumage gives impression of blackish at distance; the most sordid below of the Protean quartette; nests high in coniferous trees; eggs *white*.

Nesting.—*Nest*: of fir-twigs, grasses and moss, lined with fine grasses, vegetable down and hair; placed on horizontal limb of fir tree at considerable heights. *Eggs*: 4, pale creamy white, unmarked. *Av. size*, .65 x .51 (.16.5 x .12.7). *Season*: June; one brood.

General Range.—Western North America north to southeastern Alaska, the valley of the Upper Yukon and Athabasca, breeding south, chiefly in the mountains, to Colorado and California; south in winter thru Mexico to the highlands of Guatemala.

Range in Washington.—Summer resident in coniferous timber on both sides of the Cascades, irregularly abundant and local in distribution.

Authorities.—"Hammond's fly-catcher," Johnson, Rep. Gov. W. T. 1884 (1885), 22.] **Bendire**, Life Hist. N. A. Birds, Vol. II, 1895, p. 315ff. **D^r. Ra.**

Specimens.—C.

HAMMONDI is the western analogue of *minimus*, the well-known Least Flycatcher of the East. It has not, however, attained any such distinctness in the public mind, nor is it likely to except in favored localities. These chosen stations are quite as likely to be in the city as elsewhere; but no sooner do we begin to arrive at conclusions as to its habits, notes, etc., than the bird forsakes the region and our work is all to do over again at some distant time.

In the summer of 1895 I found Hammond Flycatchers fairly abundant on Capitol Hill (which was then in its pin-leather stage). Twenty or thirty might have been seen in the course of a morning's walk in June. Everywhere

* **Ridgway** (H. of N. A. M. Am.) recognizes two color phases of this bird, a white- and a yellow-bellied. In the latter the plumage of upperparts inclines more strongly to olivaceous.

were to be heard brisk *Seewick's* in the precise fashion of eastern *minimus*; and at rarer intervals a more intense but still harsh and unresonant *Seewick's*. These observations were confirmed by the taking of several specimens; but elsewhere and in other seasons I have found the bird most unaccountably silent, and have been able to add little to its repertory of speech.

In the summer of 1906 we found these Flycatchers preparing nests on Cannon Hill in Spokane. In both instances the birds were building out in the open after the fashion of the Western Wood Pewee (*Myiochanes richardsonii*); one on the bare limb of a horse-chestnut tree some ten feet from the ground; the other upon an exposed elbow of a picturesque horizontal limb of a pine tree at a height of some sixty feet. Near Newport, in Stevens County, we located a nearly completed nest of this species on the 20th of May, and returned on the 1st of June to complete accounts. The nest was placed seven feet from the trunk of a tall fir tree, and at a height of forty feet. The bird was sitting, and when frightened dived headlong into the nearest thicket, where she skulked silently during our entire stay. The nest proved to be a delicate creation of the finest vegetable materials, weathered leaves, fibers, grasses, etc., carefully inwrought, and a considerable quantity of the orange-colored bracts of young fir trees. The lining was of hair, fine grass, bracts, and a single feather. In position the nest might well have been that of a Wood Pewee; but, altho it was deeply cupped, it was much broader, and so relatively flatter. The four fresh eggs which it contained were of a delicate cream-color, changing to pure white upon blowing.

The Hammond Flycatcher was also found to be a common breeder in the valley of the Stehekin, where Mr. Bowles has taken several sets in very similar situations, viz., upon horizontal branches of fir trees at considerable heights.

No. 151.

WRIGHT'S FLYCATCHER.

A. O. U. No. 469. *Empidonax wrightii* Baird.

Synonym.—LITTLE GRAY FLYCATCHER.

Description.—*Adult (gray phase)*: Above dull bluish gray or faintly olivaceous on back and sides; throat and breast pale gray to whitish with admixture of ill-concealed dusky; remaining parts, posteriorly, faintly tinged with pale primrose; a whitish eye-ring; wing-markings, of the same pattern as in other species, or more extensive on secondaries and outer webs of tertials, definitely white; outer web of outermost rectrix pale whitish. *Adult (yellow-bellied phase)*: As in gray phase, but underparts strongly tinged with yellow and upperparts faintly tinged with olive-green; wing-markings less purely white. Bill blackish above,

more or less pale below and dusky tipped. *Young birds* are whitish below and the wing-bands are buffy as in other species. Length about 5.75 (140); wing 2.66 (68); tail 2.40 (61); bill .47 (12); tarsus .71 (18).

Recognition Marks.—Warbler size; prevailing gray coloration; whitish eye-ring; excessively retiring habits.

Nesting.—*Nest*: of hemp, bark-strips, etc., softly lined; built in upright crotch of bush. *Eggs*: 4 or 5, white, unmarked. Av. size, .68 x .52 (17.3 x 13.2). *Season*: June; one brood.

General Range.—Western United States and southern British Columbia, breeding in Transition and Canadian life-zones, south to southern Arizona and east to Rocky Mountains; south in winter thru southern California and Mexico.

Authorities.—Dawson, Auk, Vol. XIV, Apr. 1897, p. 176.

Specimens.—Prov. C.

BIRD-AFRAID-OF-HIS-SHADOW is the name this shy recluse deserves. The few seen in Washington have always been skulking in the depths of brush patches, or in clumps of thorn bushes, and they seem to dread nothing so much as the human eye. For all they keep so close to cover they move about restlessly and are never still long enough to afford any satisfaction to the beholder.

The only note I have ever heard it utter (and this repeatedly by different individuals) was a soft liquid *zeet*. But Major Bendire says of its occurrence at Fort Klamath in Oregon: "I do not consider this species as noisy as the Little Flycatcher [*E. traillii*] which was nearly as common, but its notes are very similar; in fact they are not easily distinguishable, but are given with less vigor than those of the former, while in its actions it is fully as energetic and sprightly as any of the species of the genus *Empi-*

Wright's Flycatcher affects higher altitudes than do the other species during the nesting season. The nest is placed at heights ranging from two to twenty feet, and is built in upright forks of bushes, or against the trunks of small saplings. Willows, alders, aspens, buck-brush, and service berry are common hosts. Perhaps the only nesting record for Washington consists of a set of four fresh eggs taken by myself from a draw on the side of Boulder Mountain overlooking the Stehekin Valley, on May 30, 1896. The nest had been deserted because of a brush fire which had swept the draw, but it was uninjured; and the situation, an alder fork eight feet up, together with the *white* eggs, made identification certain.

No. 152.

BLACK-CHINNED HUMMINGBIRD.

A. O. U. No. 429. *Trochilus alexandri* Bourc. & Muls.**Synonyms.**—ALEXANDER HUMMINGBIRD. SPONGE HUMMER.

Description.—*Adult male*: Upperparts including middle pair of tail-feathers shining bronzy green; wing-quills and remaining rectrices fuscous with purplish reflections; tail double-rounded, its feathers broadly acuminate, and central pair of feathers about .12 shorter than the third pair, the outermost pair shorter than middle pair; the gorget chiefly opaque velvety black, on each side of the median line a small irregular patch of metallic orange, or else with various jewelled iridescence posteriorly; remaining underparts white, heavily tinged with greenish on sides, elsewhere lightly tinged with dusky and dull rufous; bill slender, straight. *Adult female*: Similar to male in coloration but without gorget, a few dusky specks instead; tail different, single-rounded, central feathers like back in coloration, and scarcely shorter than succeeding pairs, remaining feathers with broad subterminal space of purplish black, and tipped with white, lateral feathers scarcely acuminate, the outermost barely emarginate on inner web. Length of adult male: about 3.50 (88.9); wing 1.75 (44.5); tail 1.25 (31.8); bill .75 (19.1). Female, length about 4.00 (101.6); wing 1.95 (49.5).

Recognition Marks.—Pygmy size; black gorget of male distinctive; female larger than in *Stellula calliope*, with which alone it is likely to come into comparison.

Nesting.—*Nest*: Of plant down secured by cobwebs, saddled upon small descending branch at moderate height, or lashed to twigs of small fork. *Eggs*: 2 or, rarely, 3, pure white, elliptical oval in shape. Av. size, .50 x .33 (12.7 x 8.3). *Season*: May or June according to altitude; one brood.

General Range.—Western United States, except the northern Pacific coast district, north in the interior into British Columbia, breeding south to northern Lower California and east to the Rocky Mountains; south in winter into Mexico.

Range in Washington.—Not common summer resident east of the Cascades only.

Authorities.—² *Bendire*, Life Hist. N. A. Birds, Vol. II, 1895, p. 199 (inferential). *Dawson*, Auk, Vol. XIV, Apr. 1897, p. 175. Sr. Ss², J.

Specimens.—(U. of W.) P¹, C.

THOSE of us, who as children were taught to call lady-bugs "lady-birds," might have been pardoned some uncertainty as to the whereabouts of the dividing line between insects and birds, especially if, to the vision of the "Hummingbird's" wings shimmering by day above the flower bed, was added the twilight visits of the hawk-moths not a whit smaller. The Hummer is painted like a butterfly; its flight is direct and buzzing like a bee's; it seeks its food at the flower's brim by poising on rapidly vibrating wing like the hawk-moth; but there the resemblances cease. For the rest it is a bird, migrating, mating, and nesting quite like grown folks.

While more than five hundred species of Hummingbirds—and these all confined to the New World—are known to science, those which have looked northward at all have shown a decided preference for the Pacific Coast. Thus, we have four species in Washington, and we send our boldest member, *Selasphorus rufus*, as far north as the St. Elias range in Alaska, while our friends east of the Mississippi River know only one species, the Ruby-throat, *Trochilus colubris*, which is own cousin, and only own cousin to our *T. alexandri*.

Contrary to the popular belief Hummers do not feed largely upon nectar, but insert their needle-bills into the depths of flowers mainly for the purpose of capturing insects. This explains the otherwise puzzling habit the birds have of revisiting the same flower beds at frequent intervals. It is not to gather new-flowing sweets, but to see what flies the sweets themselves have gathered. If a Hummingbird extracted honey to any great extent—it does some—it would be rifling the bait from its own traps. Again, the bird is not footless, as some suppose, for it spends a good deal of time perching on exposed limbs, from which it may dart, Flycatcher fashion, after passing insects.

Nor is the bird quite songless. At La Claire's, on the banks of the Pend d' Oreille River, we once witnessed a very pretty episode in the life of the Black-chinned Hummer. We were passing beside a brush-and-log fence in a clearing, when we noticed the rocking song-flight of a male Black-chin. The bird first towered to a height of forty feet, or such a matter, with loudly buzzing wing, then descended noisily in a great loop, passing under a certain projecting branch in the fence, and emitting along the lower segment of his great semicircle a low, musical, murmuring sound of considerable beauty. This note, inasmuch as we stood near one end of the fairy lover's course, was raised in pitch a musical third upon each return journey. Back and forth the ardent hero passed, until he tired at length and darted off to tap a Canada lily for nourishment, or the pretense of it. Then he perched on a twig at ten feet and submitted to a most admiring inspection.

The Hummer's back, well up on the neck, was of a dull green shade, the wings were dusky, and the head dusky, shading into the deep velvety brownish black of the throat. There was no lustrous sheen of the gorget in the dull light, but on each side of the median line of the throat lay an irregular patch of metallic orange. The underparts were tinged with dusky and dull rufous; and these modest vestments completed the attire of a plain-colored but very dainty bird.

Upon the passionate resumption of his courting dance we ordered an investigation, and succeeded in finding "the woman in the case." She rose timidly from the thicket at the very lowest point of the male's song circuit, but at sight of us quickly took to the brush again.

The fairy's nest is commonly saddled to an obliquely descending branch of willow, alder, cottonwood, or young orchard tree. It is a tiny tuft of vege-

table down, bound together and lashed to its support by a wealth of spider-webbing. Unlike the nest of *colubris*, the nest of *alexandri* is not decorated with lichens; and it not infrequently resembles some small fine sponge, not only in its yellow-brown tint, but in the elastic texture of its walls, which regain their shape after being lightly squeezed. The eggs, two in number (but sometimes three in this species alone), look like homeopathic pills—so dainty, indeed, that the owner herself must needs dart off the nest every now and then and hover at some distance to admire them. The male deserts his mate as soon as she is well established, and the entire care of the little family falls upon her shoulders. The young are fed by regurgitation, "a frightful looking act," as Bradford Torrey says.

No. 153.

RUFOUS HUMMER.

A. O. U. No. 433. *Selasphorus rufus* (Gmel.).

Synonyms.—RED-BACKED HUMMINGBIRD. NOOTKA HUMMER.

Description.—*Adult male*: In general above and below bright rufous or cinnamon-red, changing to bronzy green on crown, fading to white on belly and on chest, where sharply contrasting with gorget; wing-quills purplish-dusky on tips; the central pair of tail-feathers broadened and broadly acuminate; the succeeding pair with a deep notch on the inner web and a slighter emargination on the outer web; gorget somewhat produced laterally, of close-set rounded metallic scales, shining coppery-red, fiery red, or (varying with individuals) rich ruby-red. Bill slender and straight. *Adult female*: Above rufous overlaid with bronzy green, clear rufous on rump and tail-coverts; pattern of tail as in male but less decided; central tail-feathers green tipped with black; lateral feathers chiefly rufous, changing to black subterminally, and tipped with white; underparts whitish, shaded with rufous on sides; gorget wanting or represented by a small central patch. *Young males*: Like adult female but more extensively rufous above and throat flecked with reddish metallic scales. *Young females*: Like adult female but rump green and throat flecked with greenish scales. Length of adult male about 3.50 (88.9); wing 1.65 (41.91); tail 1.30 (33); bill .65 (16.5). Female: 3.70 (94); wing 1.75 (44.5); tail 1.28 (32.5); bill .68 (17.3).

Recognition Marks.—Pygmy size; abundant rufous of male distinctive; female requires careful discrimination from that of *S. allenii* and may be known certainly from it by notching of next central tail-feather, and by outer tail-feather more than .10 wide.

Nesting.—*Nest*: Of plant down and fine mosses bound together with cobwebs, and ornamented with lichens, placed on horizontal or declining stem of bush or tree. *Eggs*: 2, pure white, elliptical oval. Av. size, .50 x .33 (12.7 x 8.3). *Season*: April 15–July 10; two broods.

General Range.—Western North America from the Rocky Mountains to the Pacific, breeding south in mountainous regions to Arizona and north to Mount St. Elias and southwest Yukon Territory; south in winter over the tablelands of Mexico.

Range in Washington.—Common summer resident on the West-side from sea-level to timber-line; less common on the eastern slopes of the Cascades; rare in the mountains of eastern Washington.

Migrations.—*Spring:* March 15-April 15.

Authorities.—*Trochilus rufus*, **Aud.** Orn. Biog. IV. 1838, 555, pl. 372. *Seiasthorus rufus* Swains, **Baird**, Rep. Pac. R. R. Surv. IX. 1858, p. 135. T. C&S. L. Rh. D. Sr. Kb. Ra. Kk. J. B. E.

Specimens.—U. of W. P. Prov. B. BN. E.

THESE gaudily dressed little fellows, seemingly part and parcel of the sunshine itself, are by no means the delicate creations they appear to be. West of the Cascades they are, strange to say, among the very first of the spring arrivals from the South. The vanguard always arrives by the last week of March, and sometimes as early as the middle of that month. East of the Cascades they are considerably later, and are not found in nearly so large numbers. They are seldom to be seen in greatest abundance, however, much before the middle of April. At this season certain bushes flower in profusion, and in these flowers the hummers find unlimited food and drink,—honey, and the innumerable tiny insects which it attracts.

Wright Park, situated in the center of the city of Tacoma, has been very extensively planted with the decorative wild currant; and it is here that hummers may oftenest be seen in great numbers. It is not uncommon to see them by hundreds in this park, and often as many as twenty disport themselves in and around a single bush. They are the most pugnacious little creatures and are continually squabbling, the females being quite as quarrelsome as the males. Their war song is a penetrating squeak, or chirrup. The pausing of one of the birds to select some luscious insect from a cluster of flowers seems to be the signal for an onset from one or more of its fellows, when all squeak with greatest animation. One cannot help believing that this is more or less in the nature of play, for it is joined in by both the males and the females, and the one attacked never resents it in the least. Usually it describes a great circle in the air and descends into the center of some other bush, where it sits watching the others and occasionally preening its feathers. They are exceedingly tame at this season, and the bird-lover may seat himself under some flower-laden bush while these most beautiful little birds hover and perch within three or four feet of him.

What appears to be the only other vocal accomplishment of this hummer is a somewhat long-drawn, rasping note, very loud and harsh for so small a bird. This is made by the male, and, curiously enough, it is the love song

uttered while wooing his mate. She perches quietly in the center of some small tree, apparently quite insensible to his frenzied actions. These consist in flying up to a very considerable height, and then dropping in a circular course to within a few feet of where she sits. It is on the downward course that he makes his declaration of love, and if it is done to arouse her he ought to be successful. Certainly it is a sound most startling to a human being, when it explodes unexpectedly with in a few feet of his head.

It is almost unnecessary to say that the nesting habits of these little birds are of unusual interest.

The male is a disgracefully idle fellow, never doing a stroke of work while the female is building the nest, and leaving her as soon as the eggs are laid. It seems that at least he might feed her while she sits so patiently upon her eggs; but no, he retires to some warm, sunny gulch and spends his time in selfish enjoyment.

Strange to say, the first nest-building occurs during the first week in April, at which season sleet and cold rains are of not infrequent occurrence. This is long before the majority of the species have arrived from the South, and it would lead one to think that the first comers are already paired when they arrive. A nest containing two fresh eggs was found on the 14th of April, the eggs hatching on the 26th. On this last date it was raining in torrents with a bitter cold wind, yet the tiny young did not seem to suffer in the least, altho frequently left for as long as fifteen or twenty minutes by



RUFOUS HUMMER AT NEST.

their mother. Indeed it was a mystery where she could possibly have found anything to eat. This nest was saddled upon a twig a few feet above the ground amidst the sheltering branches of a huge cedar, thus protecting the young from any direct contact with the rain.

There is scarcely a conceivable situation, except directly on the ground, that these birds will not select for a nesting site. Such odd places have been chosen as a knot in a large rope that hung from the rafters of a woodshed; and again, amongst the wires of an electric light globe that was suspended in the front porch of a city residence. It may be found fifty feet up in some huge fir in the depths of the forest, or on the stem of some blackberry bush growing in a city lot.

Very often they form colonies during the nesting season, as many as twenty nests being built in a small area. Some large fir grove is generally chosen for the colony, but a most interesting one was located on a small island in Prince Sound. This island has had most of its timber cut away, and



heavily overgrown with huckleberry, blackberry, and small alders. In the center is the colony, the nests placed only a few yards apart on any vine which will serve the purpose. Huckleberry bushes seem the favorite, but many nests are built in the alders and on the blackberry vine.

The nesting season is greatly protracted, for fresh eggs may be found from April till July. This makes it seem probable that each pair raises two broods during the spring and summer. After incubation is somewhat advanced, the female is most courageous, often permitting herself to be lifted off the nest before its contents can be examined. At such times the bird student must be on his guard, as the little mother will often resent the intrusion, and her attack is always made at the eyes.

The eggs, so far as has ever been recorded, are invariably two in number. They are immaculate milky white in color; and when freshly laid the yolk makes them look like little pink moonstones, such as one finds on the beach. In shape they are elliptical, and seem large for so small a bird, measuring .50 x .33 inches.

The young are fed by regurgitation. For several days after hatching their bills are little longer than those of any other young bird; but by the time they leave the nest, their sword-like beaks are nearly as long as those of their parents.

J. H. BOWLES.



Taken near Tacoma.

Photo by W. Leon D.

TREASURE TROVE FOR THE HUMMER.

COBWEBS ARE LARGELY UTILIZED IN THE BUILDING OF A HUMMINGBIRD'S NEST

No. 154.

ALLEN'S HUMMINGBIRD.

A. O. U. No. 434. *Selasphorus alleni* Hensh.

Synonym.—GREEN-BACKED RUFOUS HUMMINGBIRD.

Description.—*Adult male*: Similar to adult male of *S. rufus*, but upperparts shining bronzy green (duller on crown); underparts, including belly, cinnamon-rufous, changing to white on chest only; tail-feathers without notching or emargination, the two outer pairs smaller and very narrow, the outermost acicular.

Adult female: Very similar to adult male of *S. rufus*, but with tail as in male *S. alleni*. Length of adult male: 3.25 (82.6); wing 1.52 (38.6); tail 1.17 (29.7); bill .63 (16). Female a little larger.

Recognition Marks.—Pygmy size; fiery gorget with green back of male unmistakable; female indistinguishable out of hand from that of *S. rufus*; outermost tail-feathers less than .10 wide.

Nesting.—As in preceding.

General Range.—Pacific Coast district north to southwestern British Colum

bia, east, southerly, to Arizona; south in winter to Lower California and Sonora.

Range in Washington.—Imperfectly made out; at least summer resident and migrant west of the Cascades; not yet reported from the East-side.

Authorities.—Lawrence, Auk, Vol. IX, Jan. 1892, p. 44. L. R. K. B. E.

Specimens.—C. E.

It is the misfortune of certain well-deserving mortals to be known to fame as the husbands or brothers or cousins of some celebrity. Allen's Hummer is the daintier, as he is the rarer, of the summer *Selasphori*, but we know him thus far only as a momentary vision. At each appearance we pause to assure ourselves that we really did see a Hummer with a green back and a red gorget, for otherwise, we have been duped again by one of those tiresome female Rufouses.

Mr. R. H. Lawrence records the Allen Hummer as a summer resident of the Gray's Harbor country, and says of it¹: "Perhaps as common as *T. rufus*, and frequenting similar places. First noted in 1891 on the East Humptulips, April 30. I had a good view of one on Quinault Lake June 13."

Mr. Chas. A. Allen, of Nicasio, Cal., who discovered this species and in whose honor it was named, says of these birds²: "Their courage is beyond question; I once saw two of these little warriors start after a Western Red-tailed Hawk, and they attacked it so vigorously that the Hawk was glad to get out of their way. But these little scamps were even then not satisfied, but helped him along after he had decided to go. Each male seems to claim a particular range which he occupies for feeding and breeding purposes, and every other bird seen by him encroaching on his preserve is at once so determinedly set upon and harassed that he is only too glad to beat a hasty retreat. During their quarrels these birds keep up an incessant sharp chirping, and a harsh rasping buzzing with the wings, which sounds very different from the low soft humming they make with these while feeding. * * * During the mating and breeding season the male frequently shoots straight up into the air and nearly out of sight, only to turn suddenly and rush headlong down until within a few feet of the ground. The wings during the downward rushes cut the air and cause a sharp, whistling screech, as they descend with frightful velocity, and should they strike anything in their downward course, I believe they would be instantly killed."

¹ Auk, Vol. IX, Jan. 1892, p. 44.

² Bendire, Life Histories N. A. Birds, Vol. II, pp. 217, 218.

CALLIOPE HUMMERS

MALE AND FEMALE, 5/6 LIFE SIZE

FROM A WATER-COLOR PAINTING BY ALLAN BROOKS



No. 155.

CALLIOPE HUMMINGBIRD.

A. O. U. No. 436. *Stellula calliope* Gould.**Synonyms.**—CALLIOPE HUMMER. STAR HUMMER.

Description.—*Adult male*: Upperparts golden-green; tail chiefly dusky, rufous at base, paler on tips, slightly double-rounded, its feathers broadening distally and nearly round at tips; sides of throat and underparts white, washed with greenish and brownish on sides; gorget somewhat produced laterally, of lengthened acuminate feathers having white bases, rose-purple, or violet, with lilac reflections. Bill straight, black above, yellowish below. *Adult female*: Coloration of upperparts, save tail, as in male; central tail-feathers green tipped with dusky; remaining rectrices greenish gray mingled with rufous basally, crossed with black, and tipped with white. *Young birds* resemble adult female but are heavily washed with rufous below and have throat more or less speckled with dusky. Length of adult male: 2.75-3.00 (69.9-76.2); wing 1.55 (39.4); tail 1.00 (25.4); bill .57 (14.5). Female much larger—up to 3.50 (88.9).

Recognition Marks.—Pygmy size; the smallest of the northern ranging species; gorget of male with *radiating* feathers of rose-purple hue distinctive, but female hard to discriminate afield.

Nesting.—Much as in other species. Av. size of *Eggs*: .47 x .30 (11.9 x 7.6). *Season*: June or July according to altitude; one brood.

General Range.—Breeding in the mountains of the West, north to central British Columbia; south in winter to the mountains of Mexico.

Range in Washington.—Summer resident, chiefly in Transition and Canadian zones, east of the Cascades, and in these mountains to the limit of trees. Mr. Lawrence's record remains unique for the West-side, but the bird probably breeds in the Olympics also.

Authorities.—? Lawrence, Auk, Vol. IX, Jan. 1892, p. 44. Bendire, Life Hist. N. A. Birds, Vol. II, 1895, p. 219. L^r, D^s, J. B.

Specimens.—Pr, C.

ORNITHOLOGISTS have been hard put to it to provide names for these most exquisite of birds, the Hummers. The realms of callithology, chromatics, esthetics, astronomy, history, classical mythology, and a score beside, have been laid under tribute to secure such fanciful and high-sounding titles as the Fiery Topaz, Ruby-and-Topaz, Allied Emerald, Red-throated Sapphire, Sparkling-tail, White-booted Racket-tail, Fork-tailed Rainbow, the Sappho Comet, the Circe, Rivoli and Lucifer Hummers, the Adorable Coquette, and, last but not least, the truly Marvelous Hummingbird (*Loddigesia mirabilis*). What wonder, then, that with so many children to provide for, Gould, the great monographer of the *Trochilidae*, should have named

this nearly silent but always beautiful species after the muse of eloquence, Calliope?

While it is true that the species may be found in abundance thruout the higher Cascades, and especially along their eastern slopes, it is hardly just to say with Bendire, that "the Calliope Hummingbird is a mountain-loving species and during the breeding season is rarely met with below altitudes of 4,000 feet, and much more frequently between 6,500 to 8,000 feet."² We have found it commonly in the northern and eastern portions of Washington at much lower altitudes, and have taken its nest in the burning gorge of the Columbia at an altitude of only six hundred feet. In the mountains the bird knows no restriction of range, save that it avoids the heavily timbered slopes of the West-side; and it is at least as common along the divide as is the Rufous Hummer.



Taken in Se. I. Ore. P. 1845 F. S. Morris.
CALLIOPE HUMMER, FEMALE.

Without doubt the mind remembers longest those birds which visit the mountain heather beds, gorgeous with flowers, and varied beyond description. A bit of heather on Wright's Peak at an elevation of 8,000 feet,

yielded thirty-two species of plants in conspicuous bloom within a stone's throw of camp. The Hummers appear to be attracted to the flower beds by color and position rather than by scent, and as sure as we neglected to rise with the sun, a troop of puzzled honey-hunters hovered by turns over our parti-colored blankets. Once a Hummer minutely inspected a red bandana handkerchief which graced the bird-man's neck; and once, I regret to say it, fluttered for some moments before his nose (sunburned!).

The tower and dive of the Calliope Hummer produces at its climax a squeak of the tiniest and shrillest quality. It is a sight well worth seeing when one of these elfin gallants, flashing like a jewel and bursting with self-consciousness, mounts slowly upward on vibrating wings to a height of a few feet, then darts back with the speed of lightning to make an affectionate pass at the placid lady on the twig below. The same tactics are

pursued when the cat or a snooping chipmunk is the object of attention, but the change in temper is unmistakable. I do not feel sure that the spitfire will strike an enemy, but the sudden explosions of winged fury hard about the ears are quite sufficient to put a prowler in a panic.

The secret of nest-finding in the case of Hummingbirds lies in the tell-tale wing-buzz of the female as she quits her nest. In this way, on the 17th of June, 1906, we found the first Washington nest of the Calliope, in the dense greenery of La Chapelle's Springs, on the Columbia River, near Chelan Falls. The nest was saddled on a slender descending branch of a red birch tree, at a point seven feet out from the trunk and twelve feet from the ground. It was overshadowed by a little canopy of leaves, and was held in place not only by its lashings of cobwebs, but by a drooping filament from a loftier branch.

In eastern Oregon Bendire found these birds nesting extensively in the pine trees. The nests were usually settled upon a cluster of pine cones, and so closely simulated their surroundings that detection would have been impossible save for the visits of their owners. Ridgway figures^a a four-story nest taken at Baird, California, and believed to represent the occupation of successive seasons.



Taken in Spokane.

Photo by F. S. Merrill.

A NEARER VIEW.

2. The Hummingbirds (Rep. Nat. Mus., 1890, pp. 253-383, plate I).

No. 156.

POORWILL.

A. O. U. No. 418. *Phalaenoptilus nuttallii* (Aud.).

Description.—*Adult*: A narrow band of pure white across throat; below this in abrupt contrast a band of black; under tail-coverts clear creamy buff; the three outer pairs of rectrices tipped broadly with white or buffy white; remaining plumage an exquisite complex of skeletonized black centers of feathers with buffy and intermingled dusky marginings, the whole producing a frosted or tarnished silvery effect; black most conspicuously outcropping on back and on center of crown; buffy "silvering" most complete on sides of crown, wing-coverts, and upper surfaces of tail-feathers; black of underparts appearing chiefly as bars where also mingled with pale olivaceous; flight feathers finely and fully banded, ochraceous and blackish. Bill black; feet (drying) dark brown; iris brown. Length: 7.00-8.00 (177.8-203.2); wing 5.50 (139.7); tail 3.50 (88.9); tarsus .65 (16.5).

Recognition Marks.—Strictly Chewink size but appearing larger; smaller than a Nighthawk, which it superficially resembles in coloration. *Poorwill* cry heard a hundred times to once the bird is seen.

Nesting.—*Eggs*: 2 laid upon the bare ground, creamy white with a faint pinkish tinge, oval to blunt elliptical oval in shape. Av. size, .99 x .75 (.25.2 x .19). *Season*: c. June 1st; one brood.

General Range.—Breeds from the western portions of the Great Plains west to the Cascade-Sierra Ranges, north into British Columbia, Alberta, etc.; south in winter thru Mexico to Guatemala.

Range in Washington.—Not common summer resident in treeless portions of eastern Washington.

Authorities.—*Introstitomus nuttallii* Cassin, "Illustrations," (1856) p. 237. C&S, D^r, D^r, Sst, J.

Specimens.—Prov. C.

THE sun has set and the last chore is done, all save carrying in the brimful pail of milk, which slowly yields tribute of escaping bubbles to the evening air. Sukey, with a vast sigh of relief, has sunk upon the ground, where, after summoning a consoling cud, she regards her master wonderingly. But the farmer boy is loath to quit the scene and to exchange the witching twilight for the homely glare of the waiting kerosene; so he lingers on his milk-stool watching the fading light in the western sky and dreaming, as only a boy can dream, of days which are yet to be. Every sense is lulled to rest, and the spirit comes forth to explore the lands beyond the hills, to conquer cities, discover poles, or scale the heights of heaven, when suddenly out of the stillness comes the plaintive cry of the Poor-will, *Poor-will poor-will*. It is not a disturbing note, but rather the authentic voice of silence, the yearning

of the bordering wilderness made vocal in appeal to the romantic spirit of youth. *Poor Will! Poor Will!* you think upon cities, actions, achievements; think rather upon solitude, upon quietness, upon lonely devotions. Come, oh, come to the wilderness, to the mystic, silent, fateful wastes! And ever after, even tho duty call him to the city, to the stupid, stifling, roaring, (and glorious) city, the voice of the Poor-will has wrought its work within the heart of the exiled farmer boy, and he owns a reverence for the silent places, a loyalty of affection for the wilderness, which not all the forced subservience of things which creak or blare or shriek may fully efface.

The Poor-will spends the day sleeping on the ground under the shelter of a sage-bush, or close beside some lichen-covered rock, to which its intricate pattern of plumage marvelously assimilates. When startled, by day, the bird flits a few yards over the sage-tops and plumps down at haphazard. If it chances to settle in the full sunlight, it appears to be blinded and may allow a close approach; but if in the shade, one is not likely to surprise it again. Even after nightfall these fairy moth-catchers are much more terrestrial in their habits than are the Nighthawks. They alight upon the ground upon the slightest pretext and, indeed, appear most frequently to attain their object by leaping up at passing insects. They are more strictly nocturnal in habit, also, than the Night Jars, and we know of their later movements only thru the intermittent exercise of song. Heard in some starlit cañon, the passing of a Poor-will in full cry is an indescribable experience, producing feelings somewhere between pleasure and fear,—pleasure in the delightful melancholy of the notes heard in the dim distance, but something akin to terror at the near approach and thrilling climax of the portentous sounds.

Taken in the hand, one sees what a quiet, inoffensive fay the Poor-will is, all feathers and itself a mere featherweight. The silken sheen and delicate tracery of the frost-work upon the plumage it were hopeless to describe. It is as tho some fairy snowball had struck the bird full on the forehead, and from thence gone shivering with ever lessening traces all over the upperparts. Or, perhaps, to allow another fancy, the dust of the innumerable moth-millers, with which the bird is always wrestling, gets powdered over its garments. The large bristles which line the upper mandible, and which increase the catching capacity of the extensive gape by half, are seen to be really modified feathers, and not hairs, as might be supposed, for in younger specimens they are protected by little horny basal sheaths. With this equipment, and wings, our melancholy hero easily becomes the envy of mere human entomologists.

No. 157.

PACIFIC NIGHTHAWK

A. O. U. No. 420 part. *Chordeiles virginianus hesperis* J. Grinnell.Synonym. *1831*

Description.—*Adult male*: Mottled, black, gray and ochraceous, and with white in patches; above black predominates, especially on forehead and back, mottling falling into indistinct bars on upper tail-coverts and tail; anterior edge of wing white; the wing-quills dusky; a large, white, transverse patch about midway on the first five primaries, save on the outer web of the first; a large V-shaped throat-patch white; remaining underparts distinctly and finely barred, dusky and whitish with some faint ochraceous,—the latter found especially on the parts adjacent to the white throat-patch; the crissum sometimes pure white, usually barred, at greater intervals than on breast; a white band crossing tail near tip, except on central feathers. Bill without evident bristles, the horny part very small, but length of gape about an inch. Tarsus very short; the middle claw enlarged, and with a curious, horny, comb-like process on the inner edge. *Adult female*: Similar, but without white band on tail, and with white spots on primaries often much reduced; throat-patch tinged with ochraceous, and suffusion of underparts by this color more pronounced. *Immature*: More finely and heavily mottled than adults, and with upperparts more heavily marked, or even suffused with ochraceous-buff. Length 9.00-10.00 (228.6-254); wing 4.85 (123.2); tail 4.32 (109.7); bill from nostril .21 (5.3).

Recognition Marks.—To appearance "Little Hawk" size—really smaller; central white spot in long wing distinctive.

Nesting.—*Eggs*: 2, deposited on the bare ground, often among rocks, sometimes upon a flat rock, or on the gravel roof of a tall building; grayish white, or dull olive-buff marbled, mottled, or clouded and speckled with various shades of olive, and brownish- or purplish-gray. Av. size, 1.18 x .86 (30 x 21.8). *Season*: June; one brood.

General Range.—Pacific coast slope north to British Columbia.

Range in Washington.—West-side, summer resident in open situations.

Authorities.—*Chordeiles popetue*, Baird, Rep. Pac. R. R. Surv. IX. 1858, p. 153. T. C&S. B. E.

Specimens.—Prov.

THE Nighthawk arrives so tardily—never before the middle of May and from that date to the middle of June—that he reminds us of the naughty child who has disregarded the parental summons and comes upon the scene sleepy and cross at 9.30 a. m., when all good little children are at school. We are sure, too, that it must be something like the necessity of eating cold victuals that makes the bird grumble *bayard* - *bayard* as it flits about discontentedly on the first morning. Moreover, there is always something incongruous about the appearance of this prairie species in the land of tall timber. He is like the

man from Kansas. He has a perfect right here and he is a very good fellow. Oh, to be sure!

The Pacific Nighthawk differs by scarcely assignable characters from the typical form of the eastern United States, but it is separated from it in distribution by two bleached phases, *C. v. henryi* and *C. v. scannetti*, of the desert and plain respectively; so we feel confident that it represents a resaturation of the intermediate stock rather than a division or colony of *C. virginianus* proper. Bird of the plains tho it be, it is pushing its way determinedly on the West-side wherever openings offer, and is as likely to occur upon the San Juan Islands or in some little clearing of the mountain valleys as upon the ampler reaches of the Chehalis prairies. Latterly, also, it has accommodated itself to the life of the city, and from the fearless way in which it appears over Pacific Avenue in Tacoma, or Second Avenue in Seattle, we judge that it must be following the well established eastern custom of laying its eggs on the flat roofs of down-town buildings.

No. 158.

WESTERN NIGHTHAWK.

A. O. U. No. 420 a. *Chordeiles virginianus henryi* (Cass.).

Description.—Similar to *C. v. hesperis*, but paler throat; areas of black reduced, white patches of throat, wing, and tail averaging larger; below more extensively tawny whitish.

Recognition Marks.—As in preceding.

Nesting.—*Nest* and *Eggs* not distinguishable from those of *C. v. hesperis*.

General Range.—Arid Transition and Canadian life-zones of the Western United States from the eastern slopes of the Rocky Mountains to the Cascade-Sierra ranges, north into British Columbia; south in winter to northern South America.

Range in Washington.—Common summer resident in open situations east of the Cascade Mountains.

Migrations.—*Spring*: Moses Lake, May 13, 1906; Chelan, May 29, 1905; Oro, May 29, 1896.

Authorities.—["Western Nighthawk," Johnson, Rep. Gov. W. T. 1884 (1885) 22]; **Bendire**, Life Hist. N. A. Birds, Vol. II, 1895, p. 168. D^r. Sr. Ra. D^r. Ss¹. Ss². Kk(?). J.

Specimens.—(U. of W.) P^r. Prov. E.

THESE Nighthawks are perfectly harmless except to moths, midges, and their ilk; and their uplifted wings half careened by the evening breeze furnish

one of the most pleasing adornments of lowland meadow or sage-covered upland. The birds "quarter the air" incessantly in a bat-like flight of irregular zigzags, often pouting as they go, *bayard - bayard*. They are not so strictly nocturnal as the Poor-wills, but put a liberal construction on "twilight," being

very common on all clear days, and, in fact, moving about at will whenever the sun slants fairly. The middle hours of the day are spent upon the ground, where their neutral tints serve a protective purpose and are almost imperceptible when the birds are resting. When the males utter great parabolic headers in the air, returning slowly and deliberately, a loud boom is uttered by the female at an interval of an inch or so across the opened mouth, will, perhaps, never be determined.



EGGS OF WESTERN NIGHTHAWK, IN SITU

During migrations scores of these birds are sometimes seen moving aloft in loose arcs and, customarily at this season, silent. While not at any time especially gregarious, favorable conditions are likely to attract considerable

numbers to a given spot. I have seen scores at a time winging noiselessly to and fro over the tranquil waters of Brook Lake, and once I saw a company of not less than two hundred executing a grand march with bewildering evolutions, in a Yakima pasture. The date in the last-mentioned instance was August 10th, and it is more likely that the birds had discovered some notable event in the insect world, than that they themselves were preparing to migrate.

The eggs of the Nighthawk are heavily mottled with slaty and other tints, which render them practically invisible to the searching eye, even tho they rest upon the bare ground or, as oftener, upon an exposed lava ledge. Except during the very warmest hours (when the sun's rays might addle them) and the coolest (when they might become chilled), the sitting bird is likely to rest beside her eggs instead of on them. The young birds when hatched place great reliance upon their protective coloration, and even permit the fondling of the hand rather than confess the defect of their fancied



Taken near Spokane.

Telephoto by W. H. Wright

WESTERN NIGHTHAWK AT MIDDAY.

security. The old bird, meanwhile has fluttered away over the ground with uncertain wing and drooping tail to drop at last on the very point of death. Or failing in this ruse, she is charging about in mid air with plaintive cries. Look upon the babies for the last time, for they will be spirited away before your return,—borne off, it is said, between the thighs of the parent bird.

No. 159.

BLACK SWIFT.

A. O. U. No. 422. *Cypseloides niger borealis* (Kennerly).**Synonyms.**—CLOUD SWIFT. NORTHERN BLACK CLOUD SWIFT.**Description.**—*Adults*: Sooty black; feathers of extreme chin, anterior portion of lores, forecrown, lining of wings, abdomen, sides, crissum, and under tail-coverts, narrowly skirted with white. Bill, feet, and eyes black. Length about 7.00 (177.8); wing 6.50 (165.1); tail 2.00 (53).**Recognition Marks.**—Sparrow size but appearing larger; long wings and rapid flight, cloud-haunting habits with color and size distinctive.**Nesting.**—*Nest*: in crannies of cliffs; reported by Bendire from the breaks of the Columbia in Douglas County. *Eggs*: unknown. *Season*: presumably June.**General Range.**—Western North America from the Rocky Mountains to the Pacific, north thru British Columbia to southwestern Alaska; partially nomadic, erratic, and far-ranging; winters south to Central America.**Range in Washington.**—Summer resident in the higher Cascades and (presumably) the Olympics; appears sporadically at lower levels, chiefly west of the Cascade Mountains.**Migrations.**—*Spring*: Seattle, May 16, 1905. *Fall*: Seattle, September 20, 1907; October 7, 1905; Tatoosh Island, June 4, 1907.**Authorities.**—*Cypseloides borealis*, Kennerly, Proc. Ac. Nat. Sci. Phila. IX., Nov. 1857, 202; *vide* Baird, Rep. Pac. R. R. Surv. IX., 1858, p. 143. Rh. D. Ra. 11. 4.**Specimens.**—Prov. C. E.

NO other bird of equal prominence in the North American ornith has so successfully eluded the investigation of the curious. Of equal prominence, I say, for on occasion the birds do exhibit themselves at close quarters with every appearance of frankness. And it is precisely because they do occasionally stoop to our level, that we long to follow them as they sweep the clouds or hasten back at a thought to their mountain fastnesses.

Cloud Swifts hunt in great straggling companies, and when one of them has attracted attention by swooping near the ground, and the eyes are lifted, a dozen others may be noted in the neighborhood, and a hundred more in the sky, up, up to the limit of vision. Certain atmospheric conditions, especially a drizzling rain, may impel the whole company to seek the lower levels, and hundreds may be seen at once hawking over the townsite, or, better yet, over the surface of a lake, as Whatcom, or

Washington. But on brighter days, and ordinarily, the passing throng occupies the whole heavens, and a bird seen darting across a distant cloud may in another instant descend to the tree-tops. Altho not quite so speedy as the White-throated Swift, there is no bird whose aerial evolutions convey such a sense of power and unfettered freedom as do those of this veritable sky-scraper.

The extraordinary volitatorial powers possessed by the Cloud Swifts permit a breadth of daily range unmatched in the case of any other species. We suppose that the flocks which appear here and there at sea-level throuout



BLACK SWIFTS.

the summer nest only in the Cascade Mountains; and it is easy to see that a hundred mile dash before breakfast would hardly figure in the day's work. On this account, we may fairly presume that the Cloud Swifts are really less numerous than might be supposed from the analogy of other birds. Perhaps half a dozen roving bands would comprise the entire population of the State. A company nesting on Glacier Peak might elect to spend one day hawking over Gray's Harbor, and the next in the Palouse country. Some such diurnal shifting does exist, for at Chelan I have seen the Swifts in June passing down the valley at early morning, and returning in the



evening for several successive days, after which they would absent themselves for a month. Again, at early morning, we have seen them filing thru Cascade Pass from west to east, hot-wing, as tho they had business in Idaho.

These Black Swifts nest chiefly in the mountains upon the face of inaccessible cliffs. This much we know, but the nest and eggs are still unknown. The closest call which these elusive fowls have had at nesting time is thus reported by Major Bendire: "The only locality where I have observed this species was on the upper Columbia River, opposite Lake Chelan, Washington, in July, 1879. Here quite a colony nested in a high perpendicular cliff on the south side of and about a mile back from the river, and numbers of them flew to and from the valley below, where they were feeding. The day was a cloudy one, and the slow drizzling rain was falling nearly the entire time I was there; this caused the birds to fly low and they were easily identified. They evidently had young and the twitterings of the latter could readily be heard as soon as a bird entered one of the numerous crevices in the cliff above. This was utterly

I. From the collection of Santa Cruz, Cal., U.S.A.

THE BOOK, "The Purple Martin," made of strong, clean, paper, etc., proved to contain the handwork of the Purple Martin (Design and

been rarely of the Ma.
b. Life Hist. N. A. Birds, Vol. II, 1892, p. 126

inaccessible, being fully 300 feet high and almost perpendicular: and without suitable ropes to lower one from above it was both useless and impracticable to make an attempt to reach the nests. These were evidently placed well back in the fissures, as nothing bearing a resemblance to one was visible from either above or below. In this locality I believe fresh eggs may be looked for about June 25."

I had word of the nesting of these birds in the summer of 1906 upon a majestic rock wall overlooking the Sahale Glacier in the Upper Horseshoe Basin of Chelan County, but a visit paid to this scene the following season failed to discover either nests or birds, altho local miners were ready to confirm the report of their presence the previous season. Dr. Edward Hasell, of Victoria, informs me that they have nested about a certain cliff overlooking Cowichan Lake on Vancouver Island. The cliff referred to is about 1,600 feet high, and access was, therefore, out of the question. Mr. W. H. Wright, the well-known nature student and guide, of Spokane, tells me that he once saw these birds nesting among some cliffs called "The Chimneys," which are five or six miles distant from Priest, Idaho. He saw the Swifts carrying twigs to the cliffs, but did not take further notice of their actions. He visited The Chimneys at the same time of year on each of two succeeding seasons, but saw nothing of the Swifts. From these reports, and from the fact that the country referred to by Bendire has been ransacked in vain, I conclude that the Black Swifts are continually shifting the scene of their annual nestings, being, in fact, as erratic in this regard as they are in the matter of their local appearances at the lower levels.

No. 160.

VAUX'S SWIFT.

A. O. U. No. 424. *Chaetura vauxi* (Townsend).

Description.—*Adults*: Above, sooty brown, lightening, nearly hair-brown, on rump and upper tail-coverts; below, light sooty gray, lightening, nearly white, on chin and throat; lores velvety black; shafts of tail-feathers denuded at tips a third of an inch. Length about 4.50 (114.3); wing 4.50 (114.3); tail 1.50 (40).

Recognition Marks.—Strictly "pygmy size," but comparison misleading—to appearance, swallow size; rapid erratic flight and bow-and-arrow-shaped position in flight distinctive. Altho this species is only half the size of the preceding, careful discrimination is necessary while the birds are a-wing.

Nesting.—*Nest*: a shallow half-saucer of short twigs, glued together with

the bird's saliva and similarly cemented to the wood inside of a hollow tree. *Eggs*: 4-6, pure white. *Av. size*, .77 x .50 (19.6 x 12.7). *Season*: June; one brood.

General Range.—Pacific Coast States and British Columbia, breeding thru-out its range; south in winter to Central America.

Range in Washington.—Not common summer resident in timbered sections and in mountain valleys; locally distributed.

Migrations.—*Spring*: Blaine, May 8, 1905. *Fall*: Seattle, September 20, 1907.

Authorities.—*Cypselus vauxi* Townsend, "Narrative," 1839, 348. T. C&S. Rh. D. Ra. D. B. E.

Specimens.—Prov. C. E.

"THE way of any bird in the air commands interest, but the way of the Swift provokes both admiration and astonishment. With volitatorial powers which are unequalled by any other land bird, this avian missile goes hurtling across the sky without injury, or else minces along slowly with pretended difficulty. Now it waddles to and fro in strange zigzags, picking up a gnat at every angle, and again it "lights out" with sudden access of energy and alternate wing strokes, intent on hawking in heaven's upper story. At favorite seasons the birds cross and recross each other's paths in lawless mazes and fill the air with their strident creakings, while here and there couples and even trios sail about in great stiff curves with wings held aloft. It is the only opportunity afforded for personal attentions, and it is probable that the sexes have no further acquaintance except as they pass and repass in ministering to the young.

"In nesting the Chimney 'Sweeps' seek out the smaller chimneys of dwelling houses, and usually only one pair occupies a single shaft. Short twigs are seized and snapped off by the bird's beak in midflight, and these, after being rolled about in the copious saliva, are made fast to the bricks, a neat and homogeneous bracket being thus formed. This will be sufficient to support the half dozen crystal white eggs and the hissing squabs which follow, unless a premature fire or a long-continued rain dissolves the glue and tumbles the fabric into the grate.

"Sitting birds, when discovered, oftenest drop below the nest and hide, clinging easily with the tiny feet supported by the spiny tail. The male bird seldom pays any attention unless there are young, in which case he even brushes past the intruder and enters the nest in his eagerness to share the hour of danger. The young are rather slow in development and it requires, according to Mr. Otto Widmann, two months to rear a family of them. Usually only one brood is raised, but a second nesting

is undertaken even as late as August if the first has proven unsuccessful" (Birds of Ohio).

Save in the matter of nesting, the Vaux Swift does not differ essentially in habit or appearance from the well-known Chimney Swift, referred to in the preceding paragraphs. It is, however, very much less common and is only of local distribution, chiefly in the lower mountain valleys. Local attachments are doubtless largely determined by the presence of large cottonwood timber, but the birds descend to the lowlands, especially after the close of the nesting season, in small roving parties, somewhat after the fashion of the Cloud Swifts, with which indeed they frequently associate. They have thus been regularly reported by West-side observers at Tacoma, Seattle, and Bellingham, and I have seen them at Blaine, and in the valleys of the Nooksack (at Glacier), Skagit, Nisqually (in Rainier National Park), and Quillayute Rivers. The only East-side records appear to be those from the north fork of the Ahtanum, in Yakima County, and the valley of the Stehekin, in Chelan County.

Vaux's Swift with us nests only in the hollow recesses of tall dead cottonwood trees, where they glue a shallow bracket of broken twigs, cemented with hardened saliva, to the curving inner wall. In California, however, they are said to be adopting the ways of civilization, and are beginning to nest in chimneys, after the fashion of *C. pelagica*.

No. 161.

WHITE-THROATED SWIFT.

A. O. U. No. 425. *Aeronautes melanoleucus* (Baird).

Synonyms.—Rock Swift. MOUNTAIN SWIFT. ROCKY MOUNTAIN SWIFT. WHITE-THROATED ROCK SWIFT.

Description.—*Adults:* Plumage black (variable, sooty brown to glossy black); forehead and line over eye paler; lore velvety black; chin, throat, breast, and belly, centrally, white—also outer edge of outer primary, tips of secondaries, lateral tail-feathers, and a conspicuous patch on flank, sometimes nearly meeting fellow across rump; bill black. Length 7.00 (177.8) or under; wing 6.50-7.00 (165.1-177.8); tail 2.65 (67.3).

Recognition Marks.—Sparrow size but larger to appearance; exceedingly rapid flight with flashing white underparts and flank patches distinctive.

Nesting.—"The nest is securely placed far in holes or crevices of rocks or indurated earths, usually at a great height; it is a saucer-like structure, about 5 x 2 inches, with a shallow cavity, made of various vegetable materials well glued together with saliva, and lined with feathers. Eggs several, in one instance

THE WHITE-THROATED SWIFT

arrowly subelliptical, 0.87 x 0.52, white" (Coes). *Season*: May and June.

General Range.—Western United States from the Rocky Mountains to the Pacific, north to Montana, Idaho, and southern British Columbia (Okanagan River to Guatemala).

Range in Washington.—Known from the Puget valley, the Columbia near Astoria, the Grand Coulee (near Cold Spring Lake), and the Cascade Pass.

Authorities.—Dawson, Auk, XIV., 1897, p. 175.

Specimens.—C.

SWIFT, swifter, swiftest, will best express the relations of our Washington *Cypseli*, where the positive degree is represented by the Vaux Swift, the comparative by the Black Cloud Swift, and the superlative by the White-throated. One who is troubled with acrophobia, the fear of high places, would attempt to spy upon the nesting haunts of these Swifts from above; when to the ordinary terrors of a sheer cliff, say a thousand feet high, is added the hurtling passage of resentful Swifts flashing about the pointed scimitars, the situation will try the strongest nerve. Viewed from below, in the open air, the evolutions of these birds may be regarded with a degree of equanimity; but when a Swift dips toward the ground, or ensures its speed across the face of some frowning precipice, one sees what a really frightful velocity is attained. There is no exact way of measuring this, but an estimate of five miles per minute could be seen within the margin of error. The



an hour to flit from Spokane to Aberdeen; or, it might breakfast at Osooyoos on the Forty-ninth Parallel, lunch in Chihuahua, and dine, a trifle late, in Panama.

This Rock Swift nests only in crevices and caves of the most inaccessible cliffs. Most of its hunting, however, is done in the upper air, where its lighter colors soon render it indistinguishable. It appears also to be less sociable than the other species upon the hunt, so that almost the only opportunities for careful study of it are afforded near the cliffs. Here there is much amorous pursuit, and the frequent sound of thrilling notes. The characteristic notes constitute a sort of war-cry, rather than song, and consist of a liquid descending scale of musical chuckling, or rubbing tones. The noise produced is much as if two pebbles were being fiercely rubbed together in a rapidly-filling jar of water.

The birds exhibit a preternatural cunning in the selection of nesting sites. Not only do they choose sheer walls, but those which, because of the fissures so afforded, are crumbling and dangerous to a degree. The hutte shown in the illustration consists of a hard lava capping over a disintegrating bed of tufa, impossible of ascent and impracticable of descent. Here in some remotest crevice the birds affix a narrow shelf, of straws, bits of weed-stalks, and miscellaneous trash, agglutinated with saliva; and in this four or five narrowly elliptical white eggs are deposited late in June or early in July.

These interesting birds are newcomers within our borders, and their comings and goings are as yet little known. Bendire in 1895 remarked^a their utter absence from Oregon and Washington. In 1896 I saw a single bird in the gorge of the Columbia near Chelan, and upon revisiting this scene in May, 1906, found that quite a colony of them were haunting a granite wall some 800 feet in height. Late in the same season, and in each succeeding year I have found them in the vicinity of Cold Spring Butte in Douglas County; and have every reason to suppose that other such colonies exist in the Grand Couleé. In the summer of 1906 Mr. Bowles and myself observed them crossing the Cascade Pass in company with Black Swifts; while still more recently, Mr. Charles De Blois Green announces^b that they have extended their range up the valley of the Okanogan into British Columbia.

a. Life Hist. N. A. Birds, Vol. II., p. 185.

b. Allan Brooks in *The Auk*, Vol. XXVI., Jan. 1909.

No. 162.

ROCKY MOUNTAIN HAIRY WOODPECKER.

A. O. U. No. 393 c. *Dryobates villosus monticola* Anthony.

Description.—*Adult male*: Above, in general, black,—glossy, at least on crown and cervix, dull on tail, fuscous on wings; a narrow scarlet band across the nape; broad white superciliary and rictal stripes separated by a black band thru eye (including lore), continuous with nape; a black malar stripe broadening behind; white nasal tufts; a lengthened white patch down middle of back; wing-coverts black, or sometimes lightly spotted with white; primaries and outer secondaries spotted with white on both webs (often very lightly on inner webs), the spots on the outer webs confluent in bars on the closed wing; tail black centrally, the two outer pairs of feathers white on exposed portions, the third pair white-tipped; entire underparts clear white; bill and feet light plumbeous. *Adult female*: Similar but without scarlet band on hindneck. *Young birds* have the crown chiefly red or bronzy or, rarely, yellowish. Length of adult: 10.00-11.00 (25.4-27.9,4); wing 5.20 (13.2); tail 4.20 (10.7); bill 1.50 (3.8).

Recognition Marks.—Robin size; black-and-white pattern of head (11 alternating areas of black and white, viewed anteriorly), with size, distinctive; lores black and underparts clear white, as compared with *D. v. hyloscopus*.

Nesting.—*Nest*: A hole excavated in tree, usually in dead portion, unlined. *Eggs*: 4-6, white. Av. size, 1.08 x .77 (.27.4 x .19.6). *Season*: May 15-June 1; one brood.

General Range.—Rocky Mountain district of the United States from New Mexico north to Montana, west to Utah and eastern Washington.

Range in Washington.—Mountain districts of eastern Washington, intergrading with *D. v. harrisi* along eastern slopes of Cascades, especially northerly.

Authorities.—*Not previously published*. Based here on specimen taken May 23rd, 1906, at Usk, Wash. (Ident. by Biol. Surv., Washington, D. C.) J. (Open to question thru confessed lack of specimens).

Specimens.—B.

THIS form finally displaces Harris (*D. v. harrisi*), with which it intergrades on the eastern slopes of the Cascades (only in the northeastern corner of the State and in the Blue Mountains. It differs in no essential respect from the western variety in habit; but because of the more open character of the timber, is rather more in evidence thruout its range.

On the 22nd of May, 1906, a male of this species was sighted at Usk, on the banks of the Pend d'Oreille River, as he clung to the top of a forty-foot pine stub and delivered, rather gently, his rolling tattoo, or call-note. After repeating this several times he dropped down and entered a hole a few feet lower. We returned the following morning and found the male bird (distinguishable by his red nuchal patch) again on the nest. When I rapped gently

on the stub he emerged; and proceeding to his drumming ground above, he rolled repeatedly. By and by the female answered in the distance with the *plimp* or *plick* note. Soon she arrived upon the nesting stub, whereupon Mr. Hairy took himself off promptly, and Mrs. Hairy entered the nest and settled to her eggs. Or so you would have supposed, wouldn't you? By the aid of sixteen spikes, "60's," and a rope, I climbed to the nest, thirty-five feet up. With a small hand-axe I enlarged the entrance (sacrificing incidentally a thumbnail, and giving sad evidence of the sway of "mortal mind") to find only *one* fresh egg, fourteen inches down.

Of course it was disappointing, but the egg was a pearl, so transparent that one could see the very outlines of the imprisoned yolk.



OF ROCKY MOUNTAIN
WOODPECKER.

No. 162.

CABANIS'S WOODPECKER.

A. O. U. No. 393 d. *Dryobates villosus hyloscopus* (Cabanis).

Synonym. Rocky Mountain Hairy Woodpecker (Cabanis, 1896, p. 100, fig. 1, to preceding form).

Description.—Similar to *D. villosus* but more slender, more lightly colored, entirely white; underparts more buff-colored; tail more grayish.

appearing on wing-coverts and upon inner secondaries (thus shading into eastern forms of the *D. villosus* group).

Recognition Marks.—As in preceding.

Nesting.—As in *D. v. monticola*.

General Range.—Imperfectly made out as regards that of *D. v. monticola*—"Western United States from the Rocky Mountains to the Pacific, excepting the special range of *D. v. harrisi*, and southward into Mexico" (Cones).

Range in Washington.—Undetermined; perhaps resident in eastern Washington between ranges of *monticola* and *harrisi*, perhaps only casual west of Cascades.

Authorities.—Bendire, Life Hist. N. A. Birds, Vol. II, 1895, p. 53. Puyallup, Wash., Dec. 25, 1895, by Geo. G. Cantwell (Ident. by Biol. Surv. Washington, D. C.).

Specimens.—C.

WOODPECKERS of the *Dryobates* group are not migrants, but they are inclined to experiment, and so not infrequently turn up in their neighbors' preserves. A specimen taken at Puyallup, December 25, 1895, must be regarded as a wanderer from the North, altho Brooks characterizes this form as regular at Sumas, B. C.

No. 164.

HARRIS'S WOODPECKER.

A. O. U. No. 393 c. *Dryobates villosus harrisi* (Aud.).

Description.—Similar to *D. v. hyloscopus*, but underparts light smoky brown or smoke-gray; sometimes narrowly streaked with black on sides; spotting on wing-quills still further reduced, that of wing-coverts usually wanting. Length of adult: 9.00-10.50 (228.6-266.7); wing 5.00 (127); tail 3.35 (85.1); bill 1.25 (31.8).

Recognition Marks.—Robin size; black-and-white pattern of head (with touch of scarlet on hind-neck of male); smoky below as compared with *D. v. monticola* or *D. v. hyloscopus*.

Nesting.—*Nest*: a hole about 25 feet up in a dead fir tree, lined with chips. *Eggs*: usually 4, crystalline white. Av. size, 1.05 x .74 (.26.7 x 18.8).

General Range.—Pacific coast district from northern California north to southern Alaska.

Range in Washington.—West-side, resident, chiefly at lower levels; east slopes of Cascades, where intergrading either with *D. v. homorus* southerly (?) or *D. v. monticola* northerly.

Authorities.—*Picus harrisi*, Audubon, Orn. Biog. 1839, 191; pl. 417. Townsend, Narrative, (1839), p. 347. T. C&S. L. Rh. D. Kb. Ra. Kk. B. E.

Specimens.—U. of W. P. Prov. B. BN.

DR. COOPER judged the Harris to be the most abundant Woodpecker in Western Washington; and this, with the possible exception of the Flicker (*Colaptes cafer saturator*), is still true. The bird ventures well out upon the eastern slopes of the Cascade Mountains, and is found sparingly in the higher mountain valleys; but his favorite resorts are burns and the edges of clearings, rather than the depths of the woods. Altho he is resident the year around we are quite likely to overlook his presence until cold weather appears to quicken his pulses, and to send him careering noisily over the tree-tops. He has spent the night, it may be, in the heart of a fir stub at the end of his winter tunnel, and now he covers a half-wooded pasture with great bounds of flight, shouting, *plick, plick*, from time to time; and he gives a loud rolling call—a dozen of these notes in swift succession—as he pulls up in the top of a dead tree to begin the day's work.

He is an active fellow, hitching up or dropping down the tree trunk with brusque ease, and publishing his progress now and then in cheerful tones. But he knows how to be patient too. In the search for hidden worms and burrowing larvæ it seems not improbable that the Woodpecker depends largely upon the sense of hearing—that he practices auscultation, in fact. A meditative tap, tap, is followed by a pause, during which the bird apparently marks the effect of his strokes, noting the rustle of apprehension or attempted escape on the part of the hidden morsel. It is not unusual for the bird to spend a half hour tunneling for a single taste, and even then the wary game may withdraw along some tunnel of its own, even beyond the reach of the bird's extensible tongue. But besides that which



Photo by Bohlman and Finley
HARRIS WOODPECKER

must be scoured from the bowels of the wood, there is much to be gleaned from the surface and in the crannies of the bark. The winter fare is also supplemented by cornel berries and the fruit of certain hardy shrubs.

It is a fair question whether the Harris Woodpecker did not get his dingy breast thru long association with his grimy grub cupboards. The dead trees which he frequents, where not actually blackened by fire, are often stained by decaying fungic growths and clinging spores, so that the snowy shirt-front of the eastern Hairy Woodpecker would be small satisfaction to him here. Or if this grimy condition of tree-trunk be not the *terminus a quo* the smoky front of the Woodpecker started, it is certainly the *terminus ad quem* its color is accurately tending. And, of course, it is easy to see how these conditions are due exactly to the humidity which prevails on the Pacific Coast, and to a lesser degree thruout the Cascades. The dry dirt of the Rocky Mountain pines is by comparison clean dirt, and so *Dryobates villosus* is able to take some decent pride in his linen as he proceeds eastward.

The Harris Woodpecker visits the winter troupes only in a patronizing way. He is far too restless and independent to be counted a constant member of any little gossip club, and, except briefly during the mating season and in the family circle, he is rarely to be seen in the company of his own kind.

The nest of this bird is usually placed well up in a small dead fir tree in some burn or slashing on dry ground. It is about ten inches deep and has no lining save fine chips, among which the crystal white eggs, four or five in number, lie partially imbedded. Incubation is begun from the last week in April to the last week in May, according to altitude, and but one brood is raised in a season. These Woodpeckers are exceptionally valiant in defense of their young, the male in particular becoming almost beside himself with rage at the appearance of an enemy near the home nest.

No. 105.

DOWNY WOODPECKER.

A. O. U. No. 304 c. *Dryobates pubescens medianus* (Swains.).

Description.—Similar to *D. v. monticola*, but much smaller; wing-coverts heavily spotted with white,—a round blotch on tip of each feather; wing-quills and primary-coverts heavily spotted with white on both webs, the blotches on outer webs forming bars on the closed wing; tertials barred and tipped with white; the outer tail-feathers barred with black; underparts white or slightly soiled. Length of adult 6.25-7.00 (158.8-177.8); wing 3.75 (95.3); tail 2.00 (50.8); bill .66 (16.8).

Recognition Marks.—Sparrow size; black-and-white color pattern with

small size distinctive; red nape of male; heavily white-spotted on wings as compared with *D. p. homorus*; white below as compared with *D. p. gairdnerii*.

Nesting.—Does not breed in Washington. *Nest*: A hole in stub or decayed limb of tree, usually at moderate height, unlined. *Eggs*: 4-6, white. *Av. size*, .75 x .59 (19.1 x 15).

General Range.—Middle and northern portions of United States and northward; of casual occurrence in the Pacific Northwest.

Range in Washington.—One example, Seattle, Feb. 20, 1892, by S. F. Rathbun.

Authorities.—*Dryobates pubescens* (Linn.), **Bendire**, Life Hist. N. A. Birds, Vol. II. 1895, pp. 55, 56. *Ra.*

Specimens.—1^r (?). C. E.

ON the 20th of February, 1892, Mr. S. F. Rathbun took what is considered to be a typical specimen, a female, of this species, near Seattle; and on the 23rd of March, 1896, I took one at Chelan which belongs either to this or to the more recently elaborated *D. p. nelsoni*. Apart from *D. gairdnerii*, whose center of distribution, at least, is pretty well known, great confusion exists in our knowledge of *Dryobates pubescens* and its varieties in the Northwest. Downy Woodpeckers are not migratory, but they rove considerably in winter, and the most we can say of these Washington specimens is that they point to the presence of *D. pubescens* or *D. p. nelsoni*, or both, as resident birds in British Columbia.

No. 166.

BATCHELDER'S WOODPECKER.

A. O. U. No. 394 b. *Dryobates pubescens homorus* (Cab.).

Synonym.—ROCKY MOUNTAIN DOWNY WOODPECKER.

Description.—Similar to *D. p. medianus*, but larger, clearer white below, and with less white spotting on wing, that of middle and greater coverts reduced or wanting. Length: 6.75-7.50 (171.5-190.5) wing 4.00 (101.6); tail 2.65 (67.3); bill .73 (18.5).

Recognition Marks.—As in preceding; white spotting of wing reduced as compared with *D. p. medianus*; underparts clear white as compared with *D. p. gairdnerii*.

Nesting.—*Nest and Eggs* as in preceding. *Season*: May; one brood.

General Range.—Rocky Mountain region of western United States and British Columbia, west to eastern slopes of Cascade-Sierra Range.

Range in Washington.—East-side, not uncommon resident, especially in

valleys of more heavily timbered section; intergrades with next form on eastern slopes of Cascades.

Authorities.—Dawson, Auk, Vol. XIV, 1897, p. 174. J. E. H.

Specimens.—U. of W. Prov.

IN the nature of the case the line of demarcation cannot be clearly drawn between this species and the more abundant Gairdner's. Specimens taken by Dr. J. C. Merrill, U. S. A., at Fort Sherman, Idaho, near our eastern boundary, were doubtfully referred to this subspecies, and really represent intergrades between *homorus* and *gairdnerii*. I have seen specimens in Spokane County which favored this form, in the whiteness of the underparts, much more strongly than *gairdnerii*.

Moreover, Batchelder's Woodpecker, if it be he, is not nearly so common in the pine and larch districts of the extreme Northeast, as is the Rocky Mountain Hairy. In the course of a two-weeks' trip along the Pend d'Oreille in May and June we encountered it only once. Bendire met with Downy Woodpeckers of some sort near Walla Walla, but found them of rare occurrence and confined to the willows of stream banks.

No. 167.

GAIRDNER'S WOODPECKER.

A. O. U. No. 394 a. **Dryobates pubescens gairdnerii** (Aud.).

Description.—Similar to *D. p. homorus*, but white spotting of wing still further reduced, usually wanting on coverts; underparts smoky gray; under tail-coverts spotted or barred with black. Length of adult about as in *D. p. medianus*.

Recognition Marks.—Sparrow size; black-and-white pattern of head; white back contrasting with black scapulars, etc.; much the commonest woodpecker; wing scarcely spotted as compared with *D. p. medianus*; underparts smoky as compared with *D. p. homorus*.

Nesting.—*Nest*: A hole, usually in deciduous tree, some 20 feet up. *Eggs*: 4-6, glossy crystalline white; rounded ovate in shape. Av. size, .74 x .56 (18.8 x 14.2). *Season*: c. May 1st; one brood.

General Range.—Pacific coast district from southern California north to British Columbia; extends somewhat beyond eastern slopes of mountain ranges southerly, shades into *D. p. homorus* along ridge of Cascades northerly.

Range in Washington.—West-side, common resident, especially in lowland groves and about clearings; occupies eastern slopes of Cascades southerly.

Authorities.—*Picus gairdneri*, Audubon, Orn. Biog. V, 1839, 317. T. C&S. Rh. Kb. Ra. D^r. S^r. Kk. B. E.

Specimens.—U. of W. Prov. B. E.



GAIRDNER WOODPECKER

THE local representative of the widespread Downy type is a perfect miniature of the more abundant Harris Woodpecker, even in flight and voice; and to the same causes must be attributed the soiling of a bosom once immaculate. Unlike his greater double, however, Gairdner's Woodpecker is for the most part confined to deciduous timber, and shows a great preference for wooded bottoms and the borders of streams. Here his industrious tap, tap and cheery *pink* notes may be heard not alone from the trunks of trees, but from the smaller branches. These he traces to the very end in a search for lurking grub or nit.

The presence of this bird is a benediction in an orchard, for he inspects every niche and crevice of a fruit tree, and if he finds deep-seated troubles, the holes he drives are as necessary as the physician's lancet. But folks still call them "sapsuckers," and shoot their little benefactors. Such people should be fined, for a first offense; and the fine remitted only in case they agree to "read up." For a second offense—Well, I believe in capital punishment myself.

The little Downies, strictly resident, as they are, wherever found, are not so hardly put to it to subsist in winter here as they are north and east. If grubs are scarce there are always edible berries and seeds to fall back on. Yet Gairdners relish nuts or a bit of suet hung out in winter time; and if the would-be patron be not too eager in first advances a very pretty friendship may be established in the course of a season.

Also, because of the season's mildness, winter bird troupes are not such an important institution as in the frigid East. But wherever Kinglets, Juncoes, Creepers, Wrens, and Chickadees do associate together for benevolent offense and defense, there is Downy in the midst,—and one can hardly help adding (the Master would be the last to forbid it) "and that to bless."

It is at times difficult to distinguish, in the case of the *pink* notes and the longer rattling call, between the voices of this bird and the Harris, but the notes of the smaller bird are usually much less in volume and strength, and have a rather more nasal quality. All Woodpeckers have also a sort of signal system, or Morse code, consisting of sundry tattoos on resonant wood. These calls are used principally, or exclusively, during the mating season, and consist, in the case of the Gairdner, of six or seven taps in regular and moderate succession. The birds have favorite places for the production of these sounds; and it is probable that birds are able to distinguish their calling mates by the timbre of the smitten wood, as well as by some subtle variation of tempo which escapes unfamiliar ears.

Gairdners place their nests at inconsiderable heights in deciduous trees, and those, if possible, among thick growths on moist ground. Both sexes assist in excavation, as in incubation. Partially decayed wood is selected

and an opening made about an inch and a quarter in diameter. After driving straight in an inch or two, the passage turns down and widens two or three diameters. At a depth of a foot or so the crystal white eggs are deposited on a neat bed of fine chips. Incubation lasts twelve days and the young are hatched about the 1st of June.

Mr. Bowles asserts that when a tree containing eggs is rapped the sitting bird will try, sometimes successfully, to deceive the inquirer by coming to the entrance and dropping out a mouthful of chippings, thus conveying the impression that she is still building. It's a shame to give it away.

No. 168.

WHITE-HEADED WOODPECKER.

A. O. U. No. 399. *Xenopicus albolarvatus* (Cass.).

Description.—*Adult male*: Body plumage and tail glossy black; wings dull black with large blotch of white on median portion of inner primaries and secondaries, and some disconnected white spotting distally; throat and entire head (not deeply) white; a scarlet patch on nape. Bill and feet slaty black; iris red. *Female*: Exactly as male *without* scarlet nuchal band. Length: 9.00-9.50 (228.6-241.3); wing 5.15 (130.8); tail 3.50 (88.9).

Recognition Marks.—Chewink to Robin size; white head unique.

Nesting.—*Nest*: A hole in live pine tree at moderate height. *Eggs*: 3-7, usually 4, pure white. Av. size, .95 x .71 (24.1 x 18). *Season*: June-July, according to altitude; one brood.

General Range.—Mountains of the Pacific Coast States north into British Columbia, east to Idaho and Utah.

Range in Washington.—Resident in the mountains, chiefly east of the Cascade summit.

Authorities.—*Picus albolarvatus*, Baird, Rep. Pac. R. R. Surv. IX, 1858, p. 97. C&S. D^r. D^r. J.

Specimens.—Prov. C.

THERE is a Gray's Harbor record for this bird, but the occurrence is unique west of the Cascades. So far as our experience goes, the White-head is to be looked for only in the pine timber which clothes the eastern slopes of the Cascades and their outliers. The range of the species extends casually northward into British Columbia, but the southern boundary of Oregon is nearer its center of distribution, and the birds decrease rapidly in numbers north of the Peshastin Range in Washington.

At first glance we would say that this bird eschews protective coloration altogether, but Mrs. Bailey argues that even black and white are not very

conspicuous colors under our interior sun, and claims that the bird gains inattention from its very unbirdlikeness. Dr. Merrill, who made a most satisfactory study of this species near Fort Klamath in Oregon, regards the bird in winter as the very simulacrum of a broken branch strongly shadowed, and crowned with snow.

Concerning its food habits, Dr. Merrill says: "I have rarely heard the Woodpecker hammer, and even tapping is rather uncommon. So far as I have observed, and during the winter I watched it carefully, its principal supply of food is obtained in the bark, most of the pines having a very rough bark, scaly and deeply fissured. The bird uses its bill as a crowbar, rather than as a hammer or chisel, prying off the successive scales and layers of bark in a very characteristic way. This explains the fact of its being such a quiet worker, and, as would be expected, it is most often seen near the base of the tree, where the bark is thickest and roughest. It must destroy immense numbers of *Scolytidae*, whose larvæ tunnel the bark so extensively, and of other insects that crawl beneath the scales of bark for shelter during winter. I have several times imitated the work of this bird by prying off the successive layers of bark, and have been astonished at the great number of insects, and especially of spiders, so exposed. As a result of this, and of its habit of so searching for food, the White-headed Woodpeckers killed here were loaded with fat to a degree I have never seen equalled in any land bird, and scarcely surpassed by some Sandpipers in autumn."

The White-headed Woodpecker is a quiet bird in manner and voice. I have never heard it utter a sound even in the presence of a nest robber but it is said to have "a sharp, clear 'titt-titt'" which it uses after the fashion of the Harris Woodpecker, when it flies from tree to tree. The bird is quite wary; but when it cherishes suspicions, it flies away composedly, with no such air of ostentatious offense as Harris indulges on occasion.

The first nest reported from this State was found on July 22nd, 1896,¹ in the valley of the Methow, where this Woodpecker is not at all common. The entrance showed like a clean-cut augur hole, one and five-eighths inches in diameter, driven in a live pine; and was reached conveniently from horse-back. Four fresh eggs lay on a bed of chips, some eight inches down, and they were remarkable only for a somewhat uniform distribution of sparse, black spots,—probably dots of adherent pitch, derived from the chips, and soiled to blackness by contact with the sitting bird.

¹ The Auk, Vol. V., 1888, p. 253.

No. 169.

ARCTIC THREE-TOED WOODPECKER.

A. O. U. No. 400. *Picoides arcticus* Swains.**Synonym.**—BLACK-BACKED THREE-TOED WOODPECKER.

Description.—*Adult male*: Upperparts glossy blue-black, duller on flight feathers; primaries and outer secondaries with paired spots of white on edges of outer and inner webs; a squarish crown-patch of yellow (cadmium orange); a small post-ocular spot of white, a transverse white cheek-stripe meeting fellow on forehead and cut off by black malar stripe from white of throat and remaining underparts; sides heavily barred or mingled with blue-black. Bill and feet plumbeous black; iris brown. *Adult female*: Like male, without yellow crown-patch. Length 9.00-10.25 (228.6-260.4); wing 5.25 (133.3); tail 3.50-4.00 (88.9-101.6); bill 1.25 (31.7).

Recognition Marks.—Chewink to Robin size; yellow crown-patch of male; back without white as compared with *P. americanus fasciatus*; and black of head continuous with that of back as compared with the *Dryobates villosus* group.

Nesting.—Not known to breed in Washington, but probably does so. *Nest*: hole in pine or fir stub, 10-18 inches deep. *Eggs*: 4-6, white, moderately glossed. Av. size, .96 x .72 (24.4 x 18.3). *Season*: last week in May, June; one brood.

General Range.—Northern North America from the Arctic regions south to northern tier of states, and in the Sierra Nevada to Lake Tahoe, south in New England and in Alleghany Mountains in winter, but breeding thruout western range.

Range in Washington.—Rare resident in coniferous forests of the central Cascades.

Authorities.—[“Black-backed three-toed woodpecker,” Johnson, Rep. Gov. W. T. 1884 (1885), 22.] **Bendire.** Life Hist. N. A. Birds, Vol. II. 1895, p. 74. E.

Specimens.—C. of W. Prov. C. E.

THE Black-backed Woodpecker should occur in all our mountains, and especially upon the pine-timbered slopes of the eastern Cascades and in the Blue Mountains. It must, however, be considered rather rare, for we have never met with it afield, and have records of only two specimens, one taken at Glacier and the other near Lake Kichelas. The species is practically non-migratory and should breed wherever it occurs. It is ordinarily a very quiet bird, devoting itself assiduously to its search for tree-boring insects and their larvæ, chiefly *Buprestidæ* and *Cerambycidæ*; and at other than breeding seasons appears stolidly to ignore the presence of strangers. Its note is described as a sharp, shrill “chirk, chirk”; and it is besides a most persistent drummer, rattling away at a single station for

minutes at a time, so that the ornithologist who is suspicious may follow the lead from a half mile's distance.

Nesting is chiefly at moderate heights—from two and a half to eight feet from the ground, Bendire says; so that there ought not to be any difficulty in studying this species once it is found.

No. 170.

ALASKAN THREE-TOED WOODPECKER.

A. O. U. No. 401 a. *Picoides americanus fasciatus* Baird.

Synonym.—LADDER-BACKED THREE-TOED WOODPECKER.

Description.—*Adult male*: Upperparts chiefly black, the back strongly barred with white, these bars more or less confluent centrally; flight-feathers marked with paired white spots, and wing-coverts sometimes more or less spotted with white; two central pairs of tail-feathers black, the next succeeding pair black mingled with white, and the remaining pairs pure white; a squarish yellow patch on crown; a distinct white post-ocular stripe extending to nape; a broad white stripe from lore to side of neck; underparts white, the sides and flanks heavily but narrowly barred with black. Bill and feet plumbeous black; iris brown. *Adult female*: Similar but without yellow crown patch; sometimes largely white on crown. Length of adult: 8.00-9.50 (203.2-241.3); wing 4.60 (116.8); tail 3.60 (91.4); bill 1.20 (30.5).

Recognition Marks.—Chewink to Robin size; lustrous black above with central white in broad bars; sides black-and-white barred.

Nesting.—*Nest*: In hole at various heights. *Eggs*: usually 4, white. Av. size, .028 x .70 (.234 x 17.8). *Season*: June; one brood.

General Range.—Timbered mountains of northern Washington, British Columbia and Alaska.

Range in Washington.—Sparingly resident in northern Cascades.

Authorities.—Brewster, Auk, X, July, 1893, pp. 230, 237.

Specimens.—Prov. C.

THIS is a permanent resident of the Hudsonian zone on the Mt. Baker range both north and south of the international boundary; also at lower elevations on Vancouver Island and on Salt Springs Island, Gulf of Georgia. Further in the interior it is of irregular distribution, being in some districts replaced by *Picoides arcticus*, and in others occupying the same localities as that species. I have no records for *arcticus* west of the Cascade range. At one time I was convinced that the Alaskan Three-toed Woodpecker occupied a higher breeding zone than the Black-backed species (*arcticus*), but had to modify this opinion on finding a pair of *fasciatus*.

breeding in the low hills back of Clinton, where one would hardly expect to find any three-toed woodpecker. Usually the species is found in the gloomy forests of balsam, spruce, and hemlock, and up to timber line. Here it is a silent bird, its tapping being usually the only sign of its presence.

The cry is a sharp cluck without the insistent ring of its allies of the *Dyrobates* group. In spring the usual chattering cry, common to so many woodpeckers, is heard, but this is more subdued and guttural than that of the Hairy Woodpecker. The males will also hang for hours on some dead spire beating the regular rattling tattoo of all true woodpeckers.

When shot, even if instantly killed, three-toed woodpeckers of both species have a marvelous faculty of remaining clinging to the tree in death. Where the trunks are draped with *Usnea* moss, it is impossible to bring one down, except when winged—then they attempt to fly, and fall to earth; but when killed outright they remain securely fastened by their strong curved claws. Repeated shots fail to dislodge them, and it is no joke to drop a big tree with a camp axe, as I have done, only to find at the finish that you cannot discover the object of your quest in the tangle of broken branches and dense rhododendron scrub. The only chance is to leave the bird and to visit the foot of the tree when the relaxing muscles have at length permitted the body to drop—usually within two days. Once I was fortunate enough to observe the exact position that enabled the bird to maintain its grip. I had shot and killed an Arctic Three-toed Woodpecker on a low stump. On going up I found the bird's feet to be three inches apart by measurement; the tail was firmly braced, and the further the body was tilted back the more firmly the claws held in the bark.

ALLAN BROOKS.

No. 171.

RED-NAPED SAPSUCKER.

A. O. U. No. 402 a. *Sphyrapicus varius nuchalis* Baird.

Description.—*Adult male*: Pileum, throat, and nuchal band carmine (or poppy-red to crimson); crown and throat patches defined by black, narrowly on sides, broadly behind, the black border of throat below forming a conspicuous crescentic chest-band; a white streak over and behind eye, more or less continuous with black-and-white mottling of upper-back; a transverse stripe from nostril around throat and chest, and continuous with white of underparts; remaining upperparts black, variously spotted, banded, and blotched with white; middle coverts and upper tail-coverts nearly pure white, the first-named forming with the exposed edges of the greater coverts a broad white wing-band; underparts centrally pure white or flushed with sulphur-yellow; sides, flanks, and under tail-

coverts heavily barred, or marked chiefly in hastate pattern, with black. Bill and feet slaty black; iris brown. *Adult female*: Like male but carmine nuchal patch reduced or wanting; throat-patch reduced by white of chin. In *young birds* the areas of red are much reduced (wanting except on crown?) the throat being clouded with dusky instead. Length about 8.50 (215.0); wing 5.00 (127); tail 3.20 (81.3); bill 1.00 (25.4).

Recognition Marks.—Chewink size; highly variegated black, white, and red (and sometimes tinged with yellow below); red throat-patch defined by black (or white above in female) distinctive.

Nesting.—*Nest*: A gourd-shaped excavation in decaying wood of live aspen tree, 5 to 30 feet up; entrance 1½ inches wide; hole 8-10 inches deep; no lining. *Eggs*: 3-6, white, moderately glossed, ovate to elliptical ovate. Av. size, .90 x .67 (22.0 x 17). *Season*: June 1-15; one brood.

General Range.—Rocky Mountain and adjacent ranges from Arizona and New Mexico north to about Lat. 54° in Alberta and British Columbia; west to eastern slopes of Cascade Mountains in Washington and Oregon and to the Sierra Nevada; in winter south to Lower California and Mexico; casual in Kansas.

Range in Washington.—In general, in the hilly country of the northeastern part of the State and in the Blue Mountains; commonly along river bottoms in Stevens County; rare or casual on eastern slopes of the Cascades.

Authorities.—Bendire, Auk, Vol. V, July, 1888, 226. *Sr.* J.

Specimens.—Prov. C.

THE western variety of the Yellow-bellied Sapsucker differs only slightly from the eastern bird in appearance, and not at all in disposition. Of *rarius* I have already said^a:

Before the maple sap has ceased running, our woods are invaded from the south by a small army of hungry Sapsuckers. The birds are rather unsuspicious, quiet, and sluggish in their movements. Their common note is a drawling and petulant *kee-a*, like that of a distant Hawk but they use it rather to vent their feelings than to call their fellows, for altho there may be twenty in a given grove, they are only chance associates and have no dealings one with another. Starting near the bottom of a tree, one goes hitching his way up the trunk, turns a lazy back-somersault to reinspect some neglected crevice, or leaps out into the air to capture a passing insect. The bulk of this bird's food, however, at least during the migration, is secured at the expense of the tree itself. The rough exterior bark layer, or cortex of, say, a maple, is stripped off, and then the bird drills a transverse series of oval or roughly rectangular holes through which the sap is soon flowing. The inner bark is eaten as removed and the sap is eagerly drunk. It is said also that in some cases the bird relies upon this sugar-bush to attract insects which it likes, and thus makes its

a. "Birds of Ohio," p. 350.

little wells do triple service. According to Professor Butler, an observer in Indiana, Mrs. J. L. Hine, once watched a Sapsucker in early spring for seven hours at a stretch, and during this time the bird did not move above a yard from a certain maple tap from which it drank at intervals.

Orchard trees suffer occasionally from this bird's depredations, but the sap of pine or fir trees is its favorite diet and available the year around.

In nesting the Red-naped Sapsucker shows a marked preference for aspen trees and its summer range is practically confined to their vicinity. A nest found on the banks of the Pend d'Oreille, opposite Lone, was placed twenty-five feet up in an aspen tree some sixteen inches in diameter. The tree was dead at the heart but there was an outer shell of live wood two inches in thickness. The bird had penetrated this outer shell with a tunnel as round as an augur-hole, and an inch and a half in diameter, and had excavated in the soft heart-wood a chamber ten inches deep vertically, five and a half horizontally, and three from front to back. Here five eggs, "as fresh as paint," reposed on the rotten chips. Like all, or most, Woodpecker eggs, these were beautifully transparent, with the position of the contained yolk clearly indicated. One egg was broken with a small round hole, as tho a careless claw had been stuck into it.

The parent birds, especially the male, who was caught on the eggs as tho inspecting the latest achievement, were very attentive, flying back and forth in neighboring trees, and giving utterance to the *keé ah* and other notes. After my descent from the ruined home, the male alighted beside the hole and tapped at the edges, as tho seeking in the sound of the wood explanation of the disaster.

No. 172.

RED-BREASTED SAPSUCKER.

A. O. U. No. 403. *Sphyrapicus ruber* (Gmel.).

Synonym.—RED-BREASTED WOODPECKER.

Description.—*Adult male*: Somewhat as in preceding but distinctive markings of head and neck and chest nearly obliterated by all-prevailing carmine which reaches well down on breast; marks alluded to most persistent in anterior portion of transverse (white) cheek-stripe and in black of lores; breast (posterior to carmine) and remaining underparts strongly suffused with yellow; white spotting of upperparts greatly reduced in area and oftenest tinged with yellow; white wing-bar fully persistent but often yellow-tinged—thus an evolved form of *S. . .* *varianus* with which male are said to exhibit every degree of gradation. *Adult*

female: like male but duller. *Young birds* are said to be "gray with dull reddish suffusion as if the head had been dipped in claret wine." Length, etc., as in preceding.

Recognition Marks.—Chewink size; bright crimson of head, "shoulders" and fore-breast distinctive; yellow underparts. Brighter than succeeding.

Nesting.—*Nest and eggs* as in *S. r. notkensis*.

General Range.—Northern Lower California, the Pacific Coast States and British Columbia, save in northwestern portion where displaced by succeeding form; retires from northern portion of range in winter.

Range in Washington.—Summer resident and migrant chiefly along the eastern slopes of the Cascades, shading into succeeding form west of the divide.

Authorities.—[Lewis and Clark, Hist. Ex. (1814) Ed. Biddle; Coles, Vol. II, p. 185.] **Bendire**, Auk, Vol. V, July, 1888, p. 230. T. D.

Specimens.—U. of W.

It is all very well for the economic ornithologist to tell us that Sapsuckers are somewhat injurious to orchard trees, but the sight of one of these splendid creatures, dropping with a low cry to the base of a tree and hitching coquettishly up its length, is enough to disarm all resentment. From what spilled chalice of old Burgundy has the bird been sipping? Or from what baptism of blood has he lately escaped that he should be dyed red for half his length? Recrudescient mythology, ill at ease in these commercial times, nevertheless casts furtive glances at him, and longs to account in its inimitable way for the telltale color.

For myself, if young fruit trees will lure such beauty from the woods, I will turn orchardist. Nor will I begrudge the early sap from my choicest pippins. I am fond of cider myself, but there are worthier. Drink, pretty creature, drink!

Well, of course, there are biographical details; but what of it? Have you not yourself been so smitten with beauty that you forgot to inquire pedigree? Tut, now; you do not even remember a single sentence she said that day. But you remember her. Enough!

Once when the bird-man was camping on the Snoqualmie trail, this crimson vision appeared at the edge of a clearing, and proceeded to inspect our plant approvingly; and while the bird-man's heart was in his mouth, it lit on the tent-post and gave it two or three inquiring raps. What need of details!

RED-BREASTED SAPSUCKER

MALE, NEARLY LIFE SIZE

FROM A WATER-COLOR PAINTING BY ALLAN BROOKS



No. 173.

NORTHWEST SAPSUCKER.

A. O. U. No. 403 a. *Sphyrapicus ruber notkensis* Suckow.

Synonyms.—NORTHERN RED-BREASTED SAPSUCKER. CRIMSON-HEADED WOODPECKER.

Description.—Like preceding but darker, red a deep crimson or maroon purple. Original markings of *S. varius nuchalis* still further effaced. Av. measurements of two adults from Glacier: Length, 9.94 (252.5); wing 5.24 (133.1); tail 3.40 (86.4); bill 1.03 (26.2).

Recognition Marks.—Chewink size; dark crimson of head, neck, and breast distinctive.

Nesting.—*Nest*: An unlined cavity excavated in dead fir or living deciduous tree, usually at considerable height. *Eggs*: 5-7, white. Av. size, .92 x .69 (23.4 x 17.5). *Season*: May or June; one brood.

General Range.—Breeding in Northwest coast district of North America from Oregon to Sitka, Alaska; south in winter to southern California.

Range in Washington.—Summer resident west of the Cascades; also partially resident in winter.

Authorities.—*Sphyrapicus ruber* Baird, **Baird**, Rep. Pac. R. R. Surv. IX, 1858, pp. 104, 105. C&S. Rh. Ra. B. E.

Specimens.—P. Prov. B. E.

VICTOR SAVINGS, of Blaine, pointed out a hole fifty feet up in a big fir stub as the Sapsucker's nest. Soon the female flew to the entrance; whereupon the male bird emerged, gorgeous in crimson panoply, and flew away, the female taking his place on the eggs. After a bit Victor pounded on the tree to raise a possible Harris further up, for the tree above is riddled with nesting holes. The female Sapsucker promptly thrust out her head and studied the situation for five minutes or so, after which she dropped back content. The only notable thing about the nest externally was a round smooth patch, the size of a dollar, upon the tree about four inches below the nest, worn and polished by the tail-feathers of the alighting birds. Judged by this mark of identification, only one of the unused holes above belonged to the Sapsucker; the remainder to the Harris Woodpecker.

The stub commands a view of the Savings's orchard, where, Victor says, the Sapsuckers do immense damage, especially to the pear trees. This nesting tree was sixteen feet around at the base, above the root bulge, and perfectly desolate of limbs. Fortunately, also, it had long since disposed of its shaggy coat of bark,—fortunately, I say, for when a fir stub sheds its fir coat it does so suddenly, and great is the fall thereof.

It was a far cry up that barren shaft with one knew not what possibilities of

defeat at the end of a line of seven, it was wanted eggs, and had to go after them. First, we had one without supply of stone (because the stone had a couple of pounds of small holes). A better guess is a stone four feet, after — but I rooted up the stone with the aid of a three-quarter-inch rope passed



THE NORTHWEST WATAKKEE
SITTING ON THE NEST

round the tree and my body. My companion at the bottom of the tree supplied building materials which I raised from time to time in case of another rope.

In the afternoon, before the nest was started. The birds, meanwhile, having become increasingly anxious, made frequent appearances from a neighboring tree, crying, "Come down, my helpless little term."

Several times they lit and near the scene of operations, but were frightened off by the resounding blows of the hand-axe. When all was over, they raised a high, strong *quack-quack*, not before heard, and reminding one generally of the Red-headed Woodpecker of bygone days.

By the time I had a hole large enough to thrust in the hand the eggs were quite hatched in chips and rotten wood. But when they were removed, they were seen to be more of them, in two regular lines, four in the lower row with

small hatching evenly, and three in the nest with point three hatched between. These were, of course, so long for the nest were the father and mother. The eggs were perfectly fresh, and had a warm, pink, red before the parents had

removed. Their surface is highly polished, and their texture varied, giving an effect as of water-marked linen paper, in heavy branching lines and coarse frost-work patterns.

No. 174.

WILLIAMSON'S SAPSUCKER.

A. O. U. No. 404. *Sphyrapicus thyroideus* (Cass.).

Synonyms.—WILLIAMSON'S WOODPECKER. RED-THROATED WOODPECKER (male). BROWN-HEADED WOODPECKER (female). BLACK-BREASTED WOODPECKER (female).

Description.—*Adult male*: In general glossy black including wings and tail; throat, narrowly, scarlet; belly gamboge yellow; sides, flanks, lining of wings and under tail coverts more or less mingled with white, black and white barred, or marked with black on white ground; a broad oblique bar on wing-coverts and small more or less paired spots on wing-quills and upper tail-coverts, white; a white post-ocular stripe and a transverse stripe from extreme forehead passing below eye to side of neck. Bill slaty; feet greenish gray with black nails; iris dark brown. *Adult female*: Very different; in general, closely barred black-and-white, or black-and-brownish; breast only pure black, in variable extent; whole head nearly uniform hair-brown, but showing traces of irrupting black; post-ocular stripe of male faintly indicated and occasionally with touch of red on throat; some intermediate rectrices black but exposed surfaces of central and outer tail-feathers black-and-white barred; white spots of wing-quills larger, paired, and changing to bars on inner quills. *Young male*: Like adult male, but black not glossy; belly paler; throat white. *Young female*: Like adult female but barring carried across head, neck, throat, and breast. Length of adult: 9.00-9.75 (228.6-247.6); wing 5.25 (133.3); tail 3.80 (96.5); bill .90-1.15 (22.9-29.2).

Recognition Marks.—Small Robin size; fine barring of female distinctive; extensive black of male with white head-stripes, white rump (upper tail-coverts) and white wing-bar; pattern of underparts (in male) clearly a modification of that of *S. v. nuchalis*, but red of throat much reduced, and black much extended.

Nesting.—*Nest*: A hole excavated by birds at any height in live deciduous tree or dead conifer. *Eggs*: 3-7, usually 4, white. Av. size, .96 x .67 (24.4 x 17). *Season*: May-June; one brood.

General Range.—Western United States chiefly in mountains and foothills from eastern slopes of the Rocky Mountains to western slopes of Sierra-Cascades, breeding from mountains of Arizona and New Mexico north to British Columbia (in the valley of the Okanagan); south in winter to Southwestern States and Mexico.

Range in Washington.—Summer resident chiefly on eastern slopes of the Cascades.

Authorities.—Bendire, Life Hist. N. A. Birds, Vol. II, 1895, p. 97. D².

Specimens.—C.

OVER and beyond the interest of *life*, which is always the greatest charm of an animal, be it bird or snail, a curious interest attaches to many creatures thru some accident of discovery, some misapprehension, or neglect, or absurd surprise,—the historical interest, humanly considered. Now the amusing thing about Williamson Sapsuckers, male and female, is that ages after God had joined them together man snatched them rudely asunder, thrusting Mr. Williamson into one pigeon-hole, labeled *williamsonii*, and Mrs. Williamson—under a vernacular alias of Brown-headed Woodpecker—since she was indiscreet enough to flit out alone one day, into another, labeled *Picus thyroideus*. This legal crime, which was committed in the probate court of ornithological inexperience in 1853 and 1857, was not corrected until 1873, when Mr. Henshaw caught a pair of these really very dissimilar birds innocently conspiring to set the decree of a blundering divorce court at naught.

Of the occurrence of this species in Washington, there is little to be said. There is a record for British Columbia, Similkameen, June, 1882, by R. V. Griffin, whence Bendire evidently assumes its presence along the eastern slope of the Cascade Mountains in Washington. I am aware of only one published instance¹, recording a female narrowly observed by myself at the Yakima Soda Springs, on August 9, 1899. Besides that we have obtained momentary glimpses of others in the Stehekin Valley in three successive seasons, 1906-1908.

Bendire notes that these Sapsuckers are like the other species in habit, except that they are not at all confined to deciduous trees, and that they are found (in Oregon, California, and Colorado) at the higher levels, from 5000 feet up. So far, we have found them in Washington only at altitudes of 1000 to 1500 feet.

No. 175.

NORTHERN PILEATED WOODPECKER.

A. O. U. No. 405 a. *Phlœotomus pileatus abieticola* (Bangs).

Synonyms.—LOGCOCK. COCK-OF-THE-WOODS. BLACK WOODCOCK.

Description.—*Adult male*: General plumage sooty black, lusterless save on wings and back; whole top of head and lengthened crest bright red; red malar stripes changing to black behind, and separating white spaces; chin and upper throat white; also a white stripe extending from nostrils and below eye to nape, and produced downward and backward to shoulder; narrow white stripe over and behind eye; lining and edge of wing, and a large spot (nearly concealed) at base of primaries, white; black feathers of sides sparingly white-tipped; bill dark plumbeous above, lighter below, save at tip; feet black. In some specimens the

¹ A. The Wilson Bulletin, No. 33, June, 1902, p. 61.

whites are everywhere tinged with pale sulphur-yellow, the color being especially noticeable in the axillaries and lining of wings. *Adult female*: Similar, but black on forehead, and black instead of red malar stripes. Length 15.50-19.00 (393.7-482.6); wing 8.50-10.00 (215.9-254); tail 5.85-7.40 (148.6-188); head 4.50-5.50 (114.3-139.7); bill 1.75-2.65 (44.5-67.3).

Recognition Marks.—Largest size; black, white and red on head in stripes; body mainly black.

Nesting.—*Nest*: high in dead trees. *Eggs*: 4-6, white. Av. size, 1.29 x .94 (32.8 x 23.9). *Season*: May; one brood.

General Range.—Formerly the heavily wooded regions of North America south of about latitude 63°, except in the southern Rocky Mountains. Now rare or extirpated in the more settled parts of the Eastern States.

Range in Washington.—Not uncommon resident in larger coniferous forests thruout the State.

Authorities.—[Lewis and Clark, Hist. Ex. (1814) Ed. Biddle: Coues, Vol. II, p. 185.] *Hylatomus pileatus* Baird, **Baird**, Rep. Pac. R. R. Surv. IX. 1858, p. 107. T. CAS. I., Rh. D., Ka. Kk. B. E.

Specimens.—U. of W. P. Prov. B. BN.

ONE'S first acquaintance with this huge black fowl marks a red-letter day in woodcraft, and it is permitted the serious student to examine the bird anatomically just once in a life-time. The scarlet crest attracts first attention, not only because of its brilliancy, but because its presence counterbalances the bill, and imparts to the head its hammer-like aspect. This crest was much sought after by the Indians of our coast, and figured prominently as a personal decoration in their medicine dances, as did the bird itself in their medicine lore. A measurement of twenty-eight inches from wing-tip to wing-tip marks the size of this "Black Woodcock," while the stiffened tail-feathers with their down-turned vanes show what adequate support is given the clinging claws when the bird delivers one of its powerful strokes. The bill is the marvel. Made apparently of horn, like other birds' bills, it has some of the attributes of tempered steel. The bird uses it recklessly as both axe and crowbar, for it hews its way thru the bark of our largest dead fir trees, in its efforts to get at the grubs, which have their greatest field of activity between the bark and the wood. It pries off great chips and flakes by a sidewise wrench of its head. A carpenter is known by his chips, but no carpenter would put his chisels to such hard service as the bird does his. As a result there is no mistaking the bark pile which surrounds the base of certain old stubs in the forest for the work of any other agency.

Possibly the most interesting of all is the Log-cock's tongue, which it is able to protrude suddenly to a distance of four or five inches beyond the tip of its beak. This provision enables the bird to economize labor in the tracking of buried sweets, and the arrangement is made possible by the great

the western forest, but to whose authorship I have no clew unless it proceeds from this bird. The note comes from well up in the trees, and is repeated slowly, after little intervals, and with a sort of funereal solemnity. If I venture to literate it, the letters are to be thought rather than said,—or better still, thought while whistled in a low key (*si*) *poolk(ng)* - - - (*si*)*poolk(ng)* - - - (*si*)*poolk(ng)*. Who will “riddle me this mystery”?

The Pileated Woodpecker chisels out its nesting hole at any height in dead timber, whether of fir, pine, spruce, or other. It nests regularly in this State, but the taking of its eggs is something of a feat; so, in default of much-coveted “luck,” we fall back on Bendire^a: “From three to five eggs are usually laid to a set, but I have seen it stated that the Pileated Woodpecker often laid six, and that a nest found near Farnville, Virginia, contained eight. An egg is deposited daily, and incubation begins occasionally before the set is completed, and lasts about eighteen days, both sexes assisting in the duty, as well as in caring for the young. Like all Woodpeckers the Pileated are very devoted parents, and the young follow them for some weeks after leaving the nest, until fully capable of caring for themselves. Only one brood is raised in a season. The eggs of the Pileated Woodpecker are pure china-white in color, mostly ovate in shape; the shell is exceedingly fine-grained and very glossy, as if enameled.”

No. 176.

LEWIS'S WOODPECKER.

A. O. U. No. 408. *Asyndesmus lewisi* Riley.

Synonym.—BLACK WOODPECKER.

Description.—*Adults*: Above shining black with a greenish bronzy luster; “face,” including extreme forehead, space about eye, cheeks, and chin, rich crimson; a collar around neck continuous with breast hoary ash; this ashy mingled intimately with carmine, or carmine-lake, on remaining underparts, save flanks, thighs and crissum, which are black; feathers of nape and underparts black and compact at base but finely dissected on colored portion of tips, each barb lengthened and bristly in character. Bill and feet black; iris brown. *Young birds* lack the crimson mask and hoary collar; the underparts are gray mingled with dusky below, with skirtings of red in increasing abundance according to age. Length of adult: 10.00-11.00 (254-279.4); wing 6.75 (171.5); tail 4.50 (114.3); bill 1.20 (30.5).

Recognition Marks.—Robin size; shining black above, hoary collar and breast; red mingled with hoary ash on underparts distinctive.

^a Life Histories of N. A. Birds, Vol. II., p. 107.

Nesting.—*Nest*: in hole excavated in dead tree, usually at considerable height. *Eggs*: 5-9, white, slightly glossed. *Av. size*, 1.03 x .80 (20.2 x 20.3). *Season*: third week in May to first week in June; one brood.

General Range.—Western United States from the Black Hills and the Rocky Mountains to the Pacific, and from southern British Columbia to southern Alberta, south to Arizona, and (in winter) western Texas. Casual in Kansas (A. O. U.).

Range in Washington.—Summer resident in timbered sections (Arid Transition and lower Canadian life-zones) east of the Cascades; especially partial to cottonwood timber lining the larger streams; locally distributed or colonizing west of the mountains, chiefly in burns.

Authorities.—[Lewis and Clark, Hist. Ex. (1814), Ed. Biddle; Cones, Vol. II., p. 187]. *Melanerpes torquatus*, Bonap. **Baird**, Rep. Pac. R. R. Surv. IX., 1858, p. 116. T. C&S. L.; D., Kb. Ra. D.; S.; S.; Kk. J. B. E.

Specimens.—U. of W. P. Prov. C. E.

NOT the least strange of the many new creatures discovered by a famous expedition of a hundred years ago was this curious black Woodpecker, which Wilson named *torquatus* (collared), but which soon became known by the name of the intrepid leader, Captain Meriwether Lewis. In habit and appearance the bird combines Crow, Jay, Woodpecker, Flicker, and Flycatcher. It is perhaps as flycatcher that we know him best, as we see him sail out from the summit of a cottonwood or towering pine-tree and make connection with some object to us invisible. If the insects are flying freely, the bird may conclude to remain aloft for a few minutes, fluttering about in great watchful circles, ready for momentary dashes and adroit seizures. A dozen of his fellows may be similarly engaged in the same vicinity, for Lewis is ever a sociable bird, and when he returns to his perch he will raise a curious raucous twitter, a rasping, grating, obstructed sound, which is his best effort at either conversation or song.

In passing from tree to tree the Woodpecker presents a Crow-like appearance, for it moves with a labored, direct flight, which is quite different from the bounding gait so characteristic of many of its real kinfolk. In alighting, also, the bird is as likely to bring up on top of a limb, in respectable bird-fashion, as to try clinging to the tree trunk.

Lewis Woodpeckers are rather wary, and if one starts out to secure a specimen, he is surprised to note how the birds manage to edge off while still out of range, and to fly away across the tree-tops rather than trust themselves to the lower levels. It is well worth one's while to examine a specimen, because of the exceptional character of the bird's plumage. The hoary ash of the collar contrasts strikingly with the glossy green of the upperparts, while the rich crimson, mingled with ashy, below, serves to emphasize the extraordinary hair-like character of the feathers themselves. If it had been

a Sapsucker, now, or a Harris, we could readily understand how the abdominal plumage might have been teased to rags thru constant friction with rough bark; but this lazy Jack-of-all-trades, who is more flycatcher than true woodpecker, how did he get his under-plumage so fearfully mussed?

For all the Black Woodpecker keeps largely to the tops of trees, it is not averse to ground-meats, and where unmolested, will descend to feed with Cousin Flicker upon crickets, geotic beetles, or fallen acorns. Grasshoppers are a favorite food, and during the season of their greatest abundance the bird requires little else. Service-berries are a staple in season, wild strawberries are not often neglected, and the bird has been known to filch a cherry now and then. Indeed, it is noteworthy that in certain fruit-growing sections, such as the Yakima Valley, Black Woodpeckers have increased in numbers of late. It must not be hastily concluded on this account that the Woodpecker is a menace to the orchard. He earns what he eats.

Orchards attract insects, and insects attract birds. Which will you have, no birds, more insects, and so, eventually, no fruit? or more birds, fewer insects, and enough fruit for all?

The occurrence of the Black Woodpecker west of the Cascades is



LEWIS WOODPECKER

subject to bird-swept-out destruction. One saw the birds pull down on a certain worm, while the very following minute seen. Whether this is because the bird's mouth has become equipped with a special tongue, or whether the bird are simply whittled in nature, we do not



THE EDWARD VERHOEFF KER. THE EDWARD VERHOEFF KER. THE EDWARD VERHOEFF KER.

There is a certain beauty about the spot, especially if one is in the middle of the forest, and the feeling of being in a great, open, sunny place is very strong. The spot is very beautiful. With the soft, gentle light of the day, the scene is very beautiful. The scene is very beautiful.

No. 177.

YELLOW-SHAFTED FLICKER.

A. O. U. No. 412 a. **Colaptes auratus luteus** Bangs.

Synonyms.—FLICKER. NORTHERN FLICKER. GOLDEN-WINGED WOODPECKER. YELLOW-HAMMER. HIGH-HOLE. HIGH-HOLDER. PIGEON WOODPECKER. WAKE-UP.

Description.—*Adult male*: Top of head and cervix ashy gray, with a vinaceous tinge on forehead; a bright scarlet band on the back of the neck; back, scapulars, and wings vinaceous gray with conspicuous black bars, brace-shaped, crescentic or various; primaries plain dusky on exposed webs; lining of the wing and shafts of the wing-quills yellow; rump broadly white; upper tail-coverts white, black-barred in broad, "herring-bone" pattern; tail double-pointed, black, and with black shafts on exposed upper surface; feathers sharply acuminate; tail below, golden-yellow and with yellow shafts, save on black tips; chin, sides of head, and throat vinaceous, enclosing two broad, black, malar stripes, or moustaches; a broad, black, pectoral crescent; remaining underparts white with heavy vinaceous shading on breast and sides, everywhere marked with sharply defined and handsome round, or cordate, spots of black. Bill and feet dark plumbeous. *Adult female*: Similar, but without black moustache. Sexes about equal in size. Length 12.00-12.75 (304.8-323.9); av. of thirteen specimens: wing 6.13 (155.7); tail 4.34 (110.2); bill 1.34 (34).

Recognition Marks.—Size not comparable to that of any better known bird; scarlet nuchal band; yellow "flickerings" in flight; pectoral crescent; white rump; black-spotted breast, etc.

Nesting.—Does not breed in Washington. *Nest*: an excavation in a tree or stump, usually made by the bird, at moderate heights; unlined, save by chips. *Eggs*: 4-10, usually 7 or 8, glossy white. Av. size, 1.09 x .85 (27.7 x 21.6).

General Range.—Northern and eastern North America, west to the eastern slope of the Rocky Mountains and Alaska. Occasional on the Pacific slope from California northward. Accidental in Europe.

Range in Washington.—Casual during migrations—a straggler from Alaska.

Authorities.—Dawson, Auk, Vol. XXV., Oct. 1908, p. 484.

Specimens.—Prov. E.

THE true Yellow-shafted Flicker, the familiar bird of the Eastern States, is occasionally taken as a straggler during the fall migrations. Mr. D. E. Brown took a typical specimen at Glacier, in 1904, and Mr. Victor Savings, of Blaine, has shot one and seen several others. A specimen in Mr. Rathbun's collection was taken by Mr. Matt. H. Gormley, on Orcas Island, October 15, 1903. The bird is a male and is typical save for the faintest possible tinge of salmon in the yellow, which marks him as a border-line specimen, probably a British Columbian bird which did not deflect eastward sufficiently in the autumn retreat.

According to Nelson, this bird is abundantly distributed thruout the timbered portions of Alaska, west even to the neighborhood of Bering Straits, and it is only surprising that so few of them come straight south to winter.

Upon the eastern borders of the range of *C. cafer*, viz., upon the eastern slopes of the Rocky Mountains in British Columbia, Idaho, Montana, and southward, specimens showing mixed characters of *cafer* and *auratus* are found—in such numbers, indeed, that they were formerly given a distinctive name, *Colaptes hybridus* Baird. This half-breed stock is perhaps the most interesting example of hybridization in American ornithology, presenting, as it does, not the familiar border-line of types being differentiated by varying environment, but the re-amalgamation of related types, differentiated ages ago from a common stock, presumably in Mexico.

No. 178.

RED-SHAFTED FLICKER.

A. O. U. No. 413. *Colaptes mexicanus collaris* (Vigors).

Synonyms.—RED-WINGED WOODPECKER. HIGH-HOLDER. "YELLOW-HAMMER." PIGEON WOODPECKER.

Description.—*Adult male*: Similar to *C. auratus luteus*, but yellow of feather-shafts, etc., replaced by orange-vermilion; cast of upper plumage correspondingly reddish (very faintly, a mere vinaceous tinge to the brown); no scarlet nuchal patch; a broad malar stripe of scarlet (replacing the black stripe of *C. a. luteus*); sides of head and throat clear bluish ash; underparts tinged with lilaceous. *Adult female*: Like male but scarlet malar stripe replaced by brown. Between this and *Colaptes auratus luteus* every form of gradation exists. Hybrids (for such they really are) most frequently reveal themselves by the presence of three scarlet patches (in the male), i. e., two malar and one nuchal. Length: averaging larger than *C. a. luteus*, up to 14.00 (355.0); wing 9.00 (175.3); tail 5.00 (127); bill 1.50 (38.1).

Recognition Marks.—Little Hawk size; brown finely barred with black above; underparts heavily spotted with black; flame-color of under wing surface prominent in flight; scarlet malar stripe of male distinctive; lighter than succeeding.

Nesting.—Much as in *C. a. luteus*, and eggs indistinguishable. For nesting sites makes use of wooden buildings or earth-banks in default of trees. *Season*: May; one brood, rarely two.

General Range.—Western United States and British Columbia from the Rocky Mountains to the Pacific and south into northern Mexico, giving place to succeeding form on northwest coast slopes, to *C. chrysoides* in extreme southwest, and hybridizing with *C. auratus luteus* in northeastern and northern portion of range.

Range in Washington.—East-side, common summer resident and migrant.

found to timber-line in the Cascades, where shading into next; partially resident in winter.

Authorities.—[Lewis and Clark, Hist. Ex. (1814) Ed. Biddle: Coues, Vol. II., p. 185] ? *C. cafer*, Allen, B. N. O. C. VI. (1881), p. 128. (T). L. L. (?) D^c. Sr. D^c. Ss^c. Ss^c. J. B.

Specimens.—(U. of W.) P^c. Prov. B. B.N.

NATURE has not dealt justly with the East-side Flicker in the matter of providing an abundance of dead timber for nesting sites. What more natural, then, than that the stunted bird should joyfully fall upon the first "frame" houses and riddle them with holes? The front door of a certain country parsonage near North Yakima testifies to at least one pastoral vacation, by the presence of three large Flicker holes in its panels. The church hard by is dotted with tin patches which conceal this bird's handiwork; and the mind recalls with glee how the irreverent Flicker on a summer Sunday replied to the parson's fifthly, by a mighty *rat-at-at-at-at* on the weather siding. The district schoolhouse of a neighboring township is worst served of all, for forty-one Flicker holes punctuate its weather-beaten sides—reason enough, surely, for teaching the young idea of that district how to shoot. Indeed, the school directors became so incensed at the conduct of these naughty fowls that they offered a bounty of ten cents a head for their destruction. But it is to laugh to see the fierce energy with which these birds of the plains, long deprived of legitimate exercise, fall to and perforate such neglected outposts of learning. The bird becomes obsessed by the idea of filling a particular wall full of holes, and no ingenuity of man can deter him. If work during union hours is discouraged, the bird returns stealthily to his task at four a. m., and chisels out a masterpiece before breakfast. If the gun speaks, and one bird falls a martyr to the sacred cause, another comes forward promptly to take his place, and there is always some patriotic Flicker to uphold the rights of academic research.

Of course the situation is much relieved in the timbered foothills and along the wooded banks of streams, where rotten stubs abound. The Flicker is at home, also, to the very limit of trees in the Cascade Mountains. Nests are ordinarily excavated late in April, and any tree or stump may serve as host. In Okanogan County I saw a Flicker's nest in a stump only two feet high, and its eggs rested virtually upon the ground. Others occur in live willows, cottonwoods, and apple trees, as well as in dead pines—the last named occasionally at a height of sixty or seventy feet. They nest also in the walls of buildings, in which case they lug in the chips to lay on beam or sill, and so prevent the eggs from rolling. In Chelan County a nest was found in a bank of fine earth among those of a colony of Bank Swallows. True to tradition the birds had gone downward after entering this bank. Excavation proved to be such a pleasant task that they had dug a hole not only eighteen inches deep but two feet long and one wide, measured horizontally. Three cubic feet of earth these industri-

hollow, and are ready to set up a clamor upon the appearance of food. This noise has been compared to the hissing of a nest of snakes, but as the fledglings grow it becomes an uproar equal to the best efforts of a telephone pole on a frosty morning.

The young are fed entirely by regurgitation, not an attractive process, but one admirably suited to the necessities of long foraging expeditions and varying fare. When able to leave the nest the fledglings usually clamber about the parental roof-tree for a day or two before taking flight. Their first efforts at obtaining food for themselves are usually made upon the ground, where ants are abundant. These with grasshoppers and other ground-haunting insects make up a large percentage of food, both of the young and adults. It will appear from this that the Red-shafted Flicker is not only harmless but decidedly beneficial—save in the matter of hostility to school boards, above mentioned.

No. 179.

NORTHWESTERN FLICKER.

A. O. U. No. 413 a. **Colaptes mexicanus saturation** Ridgway.

Description.—Like *C. m. collaris* but darker; ground color of upperparts burnt umber with a purplish tinge; ground color of underparts vinaceous buff to color of back; sides of head and throat deep smoke-gray; pileum cinnamonaceous. Specimens in the Provincial Museum at Victoria indicate hybridization between this form and *C. auratus luteus*. Of twenty-seven males from Vancouver Island nine possess in whole or in part the scarlet nuchal patch characteristic of *auratus*. Length up to 14.00 (355.6); av. of five Glacier specimens: wing 6.55 (166.4); tail 5.13 (130.3); bill 1.55 (39.4).

Recognition Marks.—As in preceding; darker.

Nesting.—*Nest*: much as in preceding, but usually higher up. *Eggs*: usually 6, somewhat less glossy than those of *C. m. collaris*.

General Range.—Northwest coast from northern California to Sitka, hybridizing with *C. a. luteus* northerly.

Range in Washington.—Common resident west of Cascades, breeding from tide-water to timber-line, migrating irregularly to East-side in winter; probably some substitution of northern birds for local summer residents on Puget Sound in winter.

Authorities.—*C. m. m. mexicanus*, Audubon, Orn. Biog. Vol. 1880, 174, pl. 410. *C. m. m. saturation* Swainson, Baird, Rep. P. C. R. R. Surv. TN., 1858, 149, 120, 121. C&S. Rh. Kb. Ra. Kk. B. E.

Specimens.—U. of W. P. Prov. B. BN. E.

THOUGHTLESS people often call the Flickers of Washington "Yellow-hammers," quite regardless of the fact that the western Flicker is no longer yellow, but orange-red. Such an oversight is unpardonable, but it would require a nice eye to distinguish out of hand this really deeply-tinted bird from its lighter brother, the Red-shafted, across the Cascades. The Cascade Mountains mark the ground of intergradation between *mexicanus*

and *saturator*, and it would seem probable that specimens taken in winter in eastern Washington and dubbed *saturator*, are really birds which summer on the eastern slopes of the Cascades, and which approach the saturated type of plumage, rather than migrants from across the mountains, as has been assumed. These are mere subtleties. It is more



THE OAK TREES OF CEDAR HILL
WASHINGTON, AUNT OF THE NORTHWESTERN FLICKER

important to note that birds of the *mexicanus* type do not appear to differ in song or in psychology from the familiar *Colaptes auratus* of the East. I therefore transcribe three paragraphs from "The Birds of Ohio" without *changes*, only substituting *flame* (i. e., orange-red) for "cloth of gold."

It is perhaps as a musician that the Flicker is best known. The word musician is used in an accommodated sense, for the bird is no professional singer, or instrumental maestro; but so long as the great orchestra of Nature is rendering the oratorio of life, there will be place for the drummer, the screamer, and the utterer of strange sounds, as well as for the human obligato. The Flicker is first, like all other Woodpeckers, a drummer. The long rolling tattoo of early springtime is elicited from some dry limb or board where the greatest resonance may be secured, and it is intended both as a musical performance and as a call of inquiry. Once, as a student, the writer roomed

in a large building, whose unused chimneys were covered with sheet-iron. A Flicker had learned the acoustic value of these elevated drums, and the sound of this bird's reveille at 4:00 a. m. was a regular feature of life at "Council Hall."

The most characteristic of the bird's vocal efforts is a piercing call delivered from an elevated situation, *clape* or *kly-ak*, and *cheer* or *kee-yer*. The scythe-whetting song is used for greeting, coaxing or argumentation, and runs from a low *wee-co*, *wec-co*—thru *wake-up*, *wake-up*, *wake-up*—to an emphatic *wy-kle*, *wy-kle*, *wy-kle*, or, in another mood sounds like *flicker*, *flicker*, *flicker*.

In the early days of April courtship is in progress, and the love-making of the Flicker is both the most curious and the most conspicuous of anything in that order. An infatuated Flicker is a very soft and foolish-looking bird, but it must be admitted that he thoroughly understands the



Taken in Rainier National Park.

Photo by W. Leon Dawson.

A NESTING SITE OF THE NORTHWEST FLICKER.

THE LARGEST STUB CONTAINED SIX EGGS ON THE POINT OF HATCHING JULY 7, 1908,
WHEN THIS PICTURE WAS TAKEN.

feminine heart and succeeds in love beyond the luck of most. A bevy of suitors will lay siege to the affections of a fair lady, say in the top of a sycamore tree. Altho the rivalry is fierce, one gallant at a time will be allowed to display his charms. This he does by advancing toward the female along a horizontal limb, bowing, scraping, pirouetting, and swaying his head from side to side with a rythmical motion. Now and then the swain pretends to lose his balance, being quite blinded, you see, by the luster of milady's eyes, but in reality he does it that he may have an excuse to throw up his wings and display the dazzling flame which lines

them. The lady is disposed to be critical at first, and backs away in apparent indifference or flies off to another limb in the same tree. This is only a fair test of gallantry and provokes pursuit, as was expected. Hour after hour, and it may be day after day, the suit is pressed by one and another until the maiden indicates her preference, and begins to respond in kind by nodding and bowing and swaying before the object of her choice, and to pour out an answering flood of softly whispered adulation. The best of it is, however, that these affectionate demonstrations are kept up during the nesting season, so that even when one bird relieves its mate upon the eggs it must needs pause for a while outside the nest to bow and sway and swap compliments.

The Northwestern Flicker is largely, but not exclusively, resident in winter. Being restricted at that season as to its insect diet, its presence appears to depend more or less upon the abundance of fruits and nuts. It eats not only grubs and worms but seeds, acorns and berries of various kinds. The fruit of the madrone appears to be a special favorite with this bird, as it is with the Robin, and I fancied that Flickers were unusually abundant on that account in the winter of 1907-08.

No. 186.

CALIFORNIA CUCKOO.

A. O. U. No. 387 a. *Coccyzus americanus occidentalis* Ridgway.

Synonyms.—WESTERN YELLOW-BILLED CUCKOO. RAIN-CROW.

Description.—*Adult*: Above nearly uniform, satiny, brownish gray, with something of a bronzy-green sheen; the inner webs of the primaries cinnamon-rufous, the outer webs and sometimes the wing coverts tinged with the same; central pair of tail-feathers like the back and completely covering the others during repose; remaining pairs sharply graduated,—blackish with broad terminal white spaces, the outer pair white-edged; a bare space around the eye yellow; underparts uniform silky white or sordid; bill curved, upper mandible black, except touched with yellow on sides; lower mandible yellow, with black tip. *Immature*: Similar to adult, but plumage of back with slight admixture of cinnamon-rufous or vinaceous; tail-feathers narrower,—the contrast between their black and white areas less abrupt. Length 12.50-13.50 (317.5-342.9); wing 6.00 (152.4); tail 6.50 (165.1); bill 1.00 (25.9); depth of bill at base .38 (9.7).

Recognition Marks.—Robin to Kingfisher size; slim form and lithe appearance; brown above, white below; sharply-graduated, broadly white-tipped tail-feathers.

Nesting.—*Nest*: a careless structure of twigs, bark-strips, and catkins, placed in trees or bushes, usually at moderate heights. *Eggs*: 3 or 4, pale greenish blue,

becoming lighter on continued exposure. Av. size, 1.31 x .94 (33.3 x 23.9). Season: June-August; one brood.

General Range.—Western temperate North America from northern Lower California north to southern British Columbia, east to New Mexico and western Texas, and south over tablelands of Mexico.

Range in Washington.—Rare summer resident, chiefly west of Cascades.

Authorities.—["Yellow-billed cuckoo" Johnson, Rep. Gov. W. T., 1884 (1885), 22]. **Lawrence**, Auk, Vol. IX., No. 1, Jan. 1892, p. 44. T.(?) L¹. D¹. Ra. B. E.

Specimens.—(U. of W.) Prov. E.

IT IS possible that these birds are really more numerous in Washington, west of the Cascades, than is generally supposed. They are, however, extremely shy and retiring in their habits, and very local in distribution. The latter characteristic is carried to such an extent that they may almost be said to colonize. For example, the only place they may be found with certainty, near Tacoma, is in a small area well within the city limits and surrounded by houses. In this small space four or five pairs may be found at any time during the summer.

Their harsh *krow-krow-krow-krow*, and the more plaintive *kru-kru*, *kru-kru*, is most often heard along the outskirts of some swamp encircled by a heavy growth of brush and small conifers mixed with deciduous trees. From the *krow-krow* note the birds have gained the name Rain Crow, popular superstition pointing out the fact that it usually rains soon afterward (an occurrence not at all unlikely to happen in western Washington, irrespective of the suggestion of the Cuckoo).

Their food consists entirely of caterpillars, spiders, and other insects, this being perhaps the only bird to make war extensively upon the tent-caterpillar. The poem, "He sucks little birds' eggs to make his voice clear," etc., applies only to the Cuckoo of Europe. Small birds, it is true, are very often seen in pursuit of a Cuckoo, but this must be purely on account of its close resemblance in form to that of their arch-enemy, the Sharp-shinned Hawk.

The nest is rather a frail structure, tho much more bulky than nests of the Black-billed or Yellow-billed Cuckoo. It is placed from four to ten feet from the ground, usually nearer ten, and is most often built against the trunk of a baby fir. The materials used consist of coarse dead twigs, heavily lined with coarse tree-moss and sprays of dead fir needles.

The eggs are two or three in number, most often three, and are laid from the second week in June to the first of July. They are a pale bluish green in color, overlaid with a light chalky deposit, somewhat like that found on Cormorant eggs. In shape they vary from long to rounded oval, and

average in measurement 1.60 x .99 inches. A week often elapses between the laying of the first and the last egg.

Upon one occasion I noticed a most interesting trait in these birds, which I never observed in any other species. While standing in an open woodland listening to a pair of Cuckoos calling to each other, I saw the male suddenly fly past with a large green worm in his bill. He flew directly to the female, who was perched in a tree a few yards distant, and for a moment or two they sat motionless a few inches apart looking at each other. The male then hovered lightly over his mate and, settling gently upon her shoulders, gracefully bent over and placed the worm in her bill. It was a pretty and daintily performed piece of love-making.

J. H. BOWLES.

No. 181.

BELTED KINGFISHER.

A. O. U. No. 390. *Ceryle alcyon* (Linn.).

Synonym.—Commonly called plain KINGFISHER.

Description.—*Adult male*: Above, bright bluish gray, feathers with blackish shafts or shaft-lines; loosely crested; edge of wing white; primaries dusky, white-spotted on outer web, narrowly white-tipped, broadly white on inner web; coverts often delicately tipped or touched with white; tail bluish gray above, the central feathers with herring-bone pattern of dusky; remaining feathers only blue-edged, dusky, finely and incompletely barred with white; lower eyelid white, and a white spot in front of eye; throat and sides of neck, nearly meeting behind, pure white; a broad band of bluish gray across the breast; remaining underparts white, sides under wing, and flanks, heavily shaded with blue-gray; bill black, pale at base below; feet dark. *Adult female*: Similar, but with a chestnut band across lower breast, and with heavy shading of the same color on sides. *Immature*: Like adults, except that the plumbeous band of breast is heavily mixed with rusty (suggesting chestnut of female). Length 12.00-14.00 (30.48-35.56); wing 6.21 (157.7); tail 3.84 (97.5); bill from nostril 1.69 (42.9).

Recognition Marks.—"Kingfisher" size; blue-gray and white coloration; piscatorial habits; rattling cry.

Nesting.—*Nest*: at end of tunnel in bank, four to six feet in, unlined. *Eggs*, 6-8, pure white. Av. size, 1.31 x 1.04 (33.3 x 26.4). *Season*: May; one brood.

General Range.—North America from the Arctic Ocean south to Panama and the West Indies. Breeds from the southern border of the United States northward.

Range in Washington.—Summer resident, chiefly at lower levels; partially resident west of the Cascades, and casually resident on the East-side.

Authorities.—[Lewis and Clark, Hist. Ex. (1814) Ed. Biddle; Coues, Vol. II., p. 189.] *Ceryle alcyon*, Boie, **Baird**, Rep. Pac. R. R. Surv. IX., 1858, p. 158. T. CWS, L., D., Sr., Kb., Ra., D2, Ss1, Ss2, Kk., J., B. E.

Specimens.—U. of W. P. Prov. B. B. N. E.

WHEN we were small boys and had successfully teased our fathers or big brothers to let us go fishing with them, we were repeatedly admonished not to "holler" for fear of scaring the fish. This gratuitous and frequently emphatic advice would have been discredited if the example of the Kingfisher had been followed. Either because noise doesn't matter to fish, or because he is moved by the same generous impulse which prompts the cougar to give fair and frightful warning of his presence at the beginning of an intended foray, the bird makes a dreadful racket as he moves



Taken near Portland

Photo by A. W. Anthony.

THE KING ROW

up stream and settles upon his favorite perch, a bare branch overlooking a quiet pool. Here, altho he waits long and patiently, he not infrequently varies the monotony of incessant scrutiny by breaking out with his weird rattle—like a watchman's call, some have said; but there is nothing metallic about it, only wooden. Again, when game is sighted, he rattles with excitement before he makes a plunge; and when he bursts out of the water with a wriggling minnow in his beak, he clatters in high glee. If, as rarely happens, the bird misses the stroke, the sputtering notes which follow speak plainly of disgust, and we are glad for the moment that Kingfisher talk is not exactly translatable.

It is not quite clear whether the bird usually seizes or spears its prey, altho it is certain that it sometimes does the latter. The story is told of

a Kingfisher which, spying some minnows in a wooden tub nearly filled with water, struck so eagerly that its bill penetrated the bottom of the tub, and so thoroly that the bird was unable to extricate itself; and so died—a death almost as ignominious as that of the king who was drowned in a butt of Malmsey wine.



Taken near Portland.

Photo by A. W. Anthony.

A FISHER PRINCE AT HOME.

punctilious about the observance of boundaries and allotments. For the rest, why should they hunt up avian companions, whose tastes are not educated to an appreciation of exposed, water-soaked stubs, and a commanding view of river scenery? However, I did once see a Kingfisher affably hobnobbing with a Kingbird, on a barren branch which overlooked a crystal stream in Idaho. I wonder if they recognized a mutual kingliness, this humble fisherman and this petulant hawk-driver?

Kingfisher courtship is a very noisy and spirited affair. One does not know just how many miles up and down stream it is considered proper for the gallant to pursue his enamorata before she yields a coy acceptance; and it is difficult to perceive how the tender passion can survive the din of the

When a fish is taken the bird first thrashes it against its perch to make sure it is dead, and then swallows it head foremost. If the fish is a large one its captor often finds it necessary to go thru the most ridiculous contortions, gaspings, writhings, chokings, regurgitations, and renewed attempts, in order to encompass its safe delivery within.

Kingfishers have the reputation of being very unsocial birds. Apart from their family life, which is idyllic, this reputation is well sustained. Good fishing is so scarce that the birds deem it best to portion off the territory with others of their own kind, and they are very

actual proposal, where both vociferate in wooden concert to a distracted world. But la! love is mighty and doth mightily prevail.

The nesting tunnel is driven laterally into the face of a steep bank, preferably of sand or loam, usually directly over the water, but occasionally at a considerable distance from it. Dr. Brewer reports one in a gravel pit at least a mile from water. The birds are not so particular as are the Bank Swallows about digging near the top of the bank, but, especially if the bank is small, usually select a point about midway. The tunnel goes straight in or turns sharply to suit an occasional whim, until a convenient depth, say five or six feet, is reached, when a considerable enlargement is made for the nest chamber. Here, early in May, six or seven white eggs are laid, usually upon the bare earth, but sometimes upon a lining of grass, straw and trash. From time to time the birds eject pellets containing fish scales, the broken testæ of crawfish and other indigestible substances, and these are added to the accumulating nest material. Sanitary regulations are not very strict in Kingfisher's home, and by the time the young are ready to fly we could not blame them for being glad to get away. The female is a proverbially close sitter, often permitting herself to be taken with the hand, but not until after she has made a vigorous defense with her sharp beak. If a stick be introduced into the nest she will sometimes seize it so tightly that she can be lifted from the eggs, turtle fashion.

The parents are very busy birds after the young have broken shell, and it takes many a quintal of fish to prepare six, or maybe seven, lusty fisher princes for the battle of life. At this season the birds hunt and wait upon their young principally at night, in order not to attract hostile attention to them by daylight visits. Only one brood is raised in a season, and since fishing is unquestionably a fine art, the youngsters require constant supervision and instruction for several months. A troop



EVENING ON THE POND D'OREILLI

of six or eight birds seen in August or early in September does not mean that Kingfisher is indulging in mid-summer gaities with his fellows, but only that the family group of that season has not yet been broken up.

The Kingfisher is not only a fresh water bird of wide distribution, but a lover of the sea. It is found thruout the length of our ample shores on both sound and ocean; but is, of course, most common where suitable nesting bluffs of clay or sand are afforded. Thruout western Washington the bird is largely resident, and if this very stable species ever does begin to show variation, it will be in the Pacific Northwest.





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